Manufacturers Record

Exponent of America



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DECEMBER 22, 1921

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A ROYAL PALACE FOR BANKING.

The New York Reserve Bank is now spending for a banking palace more money than the United States Government has ever appropriated in any one year for the last twenty years, for public buildings, including custom houses, court houses and post offices for all our 48 States.

This royal palace of banking is to cost more than $25,600,000. It is to cost more than the combined cost of the White House and the Treasury Buildings at Washington, and the State Capitols of a dozen States of the Union. It is to be luxurious and lavish in its appointments, in its marble and brass trimmings, its gymnasium, its club quarters, its baths, its dining rooms.

The fees to be paid to the architects and engineers are to exceed $1,000,000. The foundation cost alone is reported to exceed $1,800,000.

At a time when the New York Reserve Bank was being authorized to spend over $25,600,000 for this luxurious palace of banking, the total amount of money which six of the twelve Reserve Banks were lending in eighteen states, including all of the New England states, the states of New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, West Virginia, Ohio, Kentucky, North Carolina, South Carolina, Arkansas, the greater part of Missouri and parts of Illinois, Indiana, Tennessee and Mississippi, on "agricultural and live stock" loans amounted to only $17,167,000, or scarcely two-thirds as much as the sum appropriated for the palace of banking in New York by the Federal Reserve Bank of that city.

These facts, which have been taken from the official reports of the Federal Reserve Board, are indicative of the spirit which has prevailed in the management of the whole Federal Reserve System, from the Board in general control in Washington to nearly, if not all, of the Federal Reserve Banks in twelve cities of the country. Some of these Federal Reserve Banks have perhaps had wiser management, but they are a part of a system which has well nigh wrecked the universe financially; and what else could have been expected under a management which permits such amazing extravagance at a time when the business interests of the country have been driven into the worst commodity panic in the world's history? The reckless extravagance and wild waste of the people's money in this royal palace or temple of banking can be appreciated from the simple statement that its cost probably far exceeds the cost of any royal palace for emperor, czar, or king, sultan or oriental prince or potentate in all the world's history.

The criminal folly of building such a structure at the present time in which to house the New York Federal Reserve Bank only serves to demonstrate the unfitness of every man who is a member of the New York Bank Board or the Federal Reserve Board at Washington who has approved, or who has even failed to disapprove of this vast expenditure.

The figures as to the cost of this "banking palace" in New York are revealed in the reply of the Reserve Board to the Overman Resolution calling for information as to the alleged "amazing waste of public moneys." Former Comptroller of the Currency Williams, in a letter to Senator Overman, has made a remarkably interesting analysis of the Reserve Board's astounding report to the Senate, from which we are publishing some lengthy extracts in this issue.



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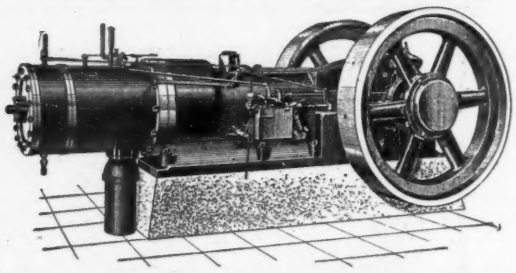


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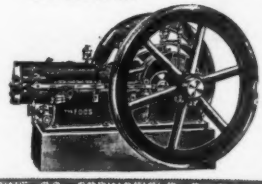
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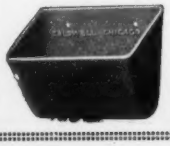
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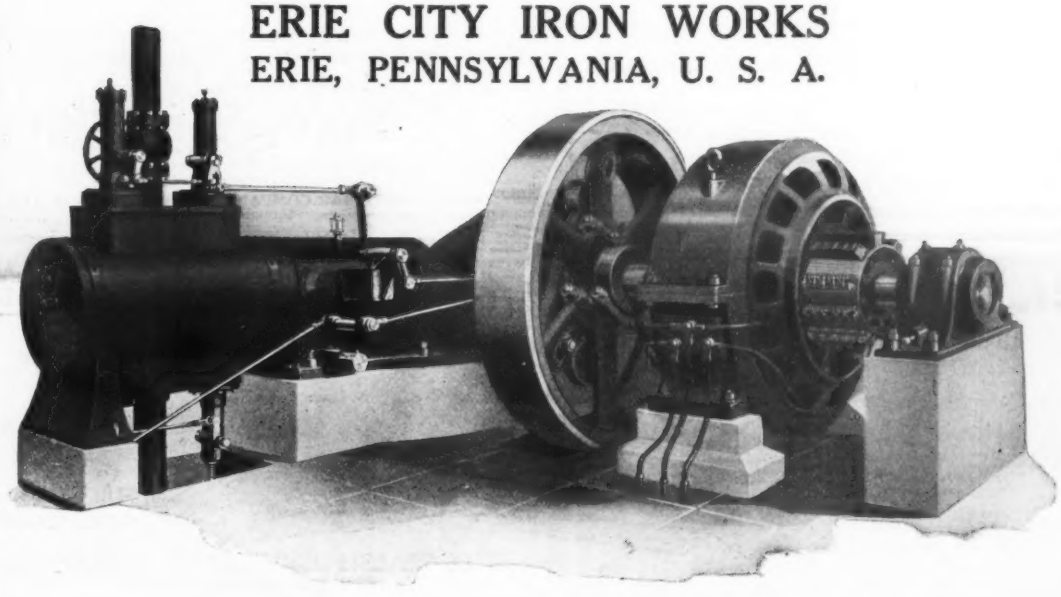
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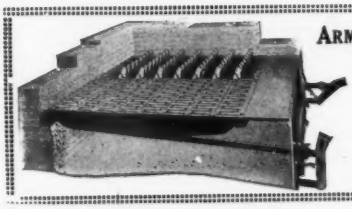
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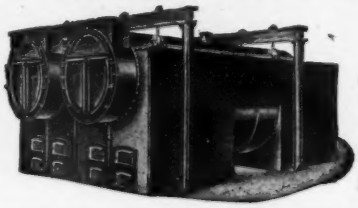
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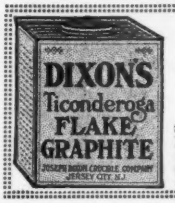
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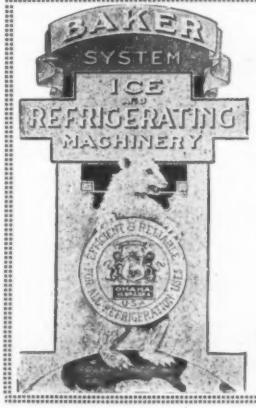
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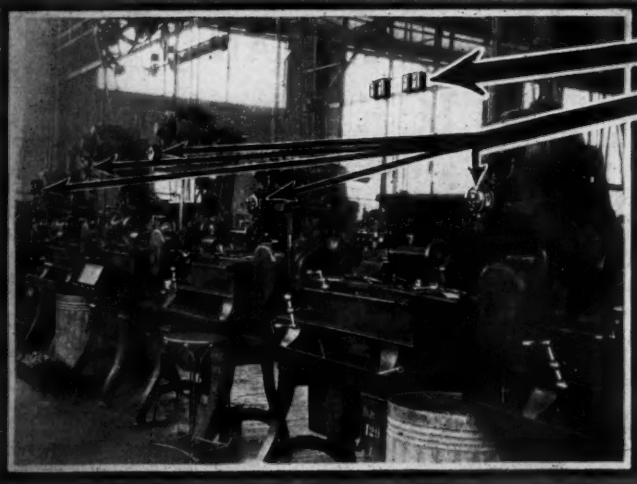
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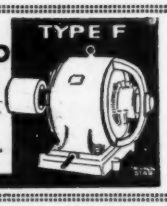
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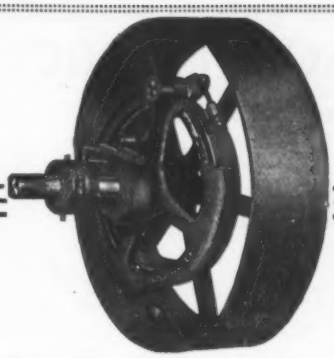
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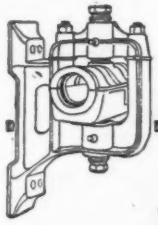
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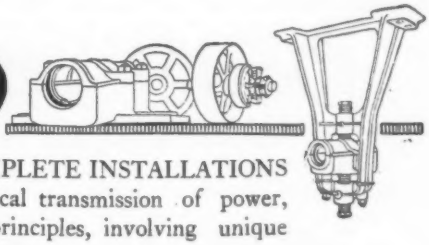
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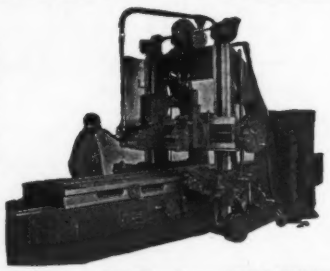
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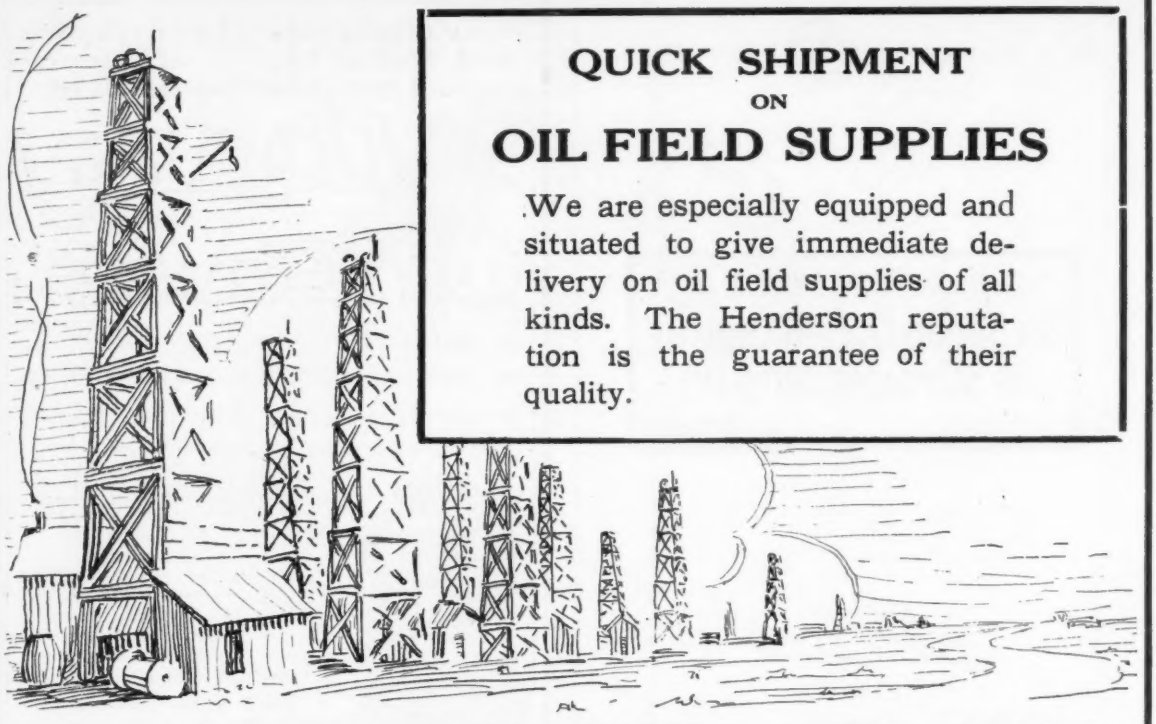
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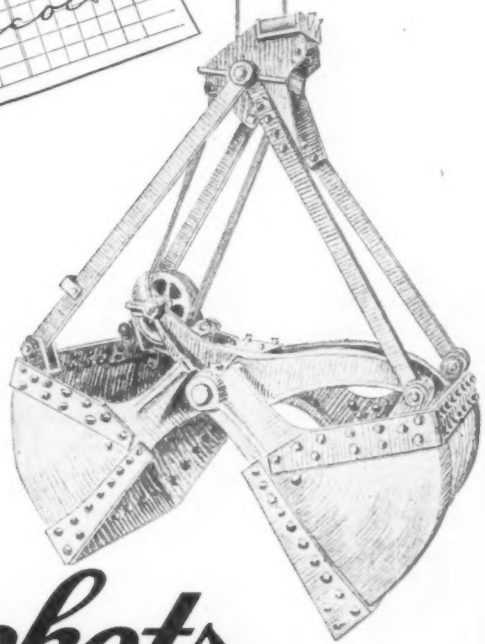
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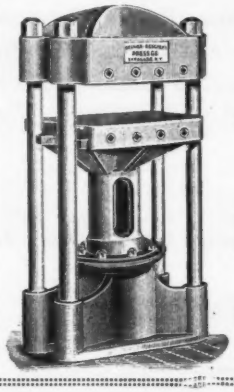
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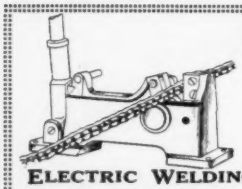
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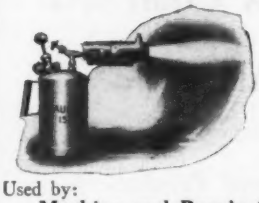
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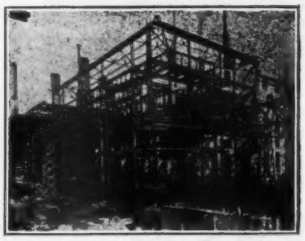
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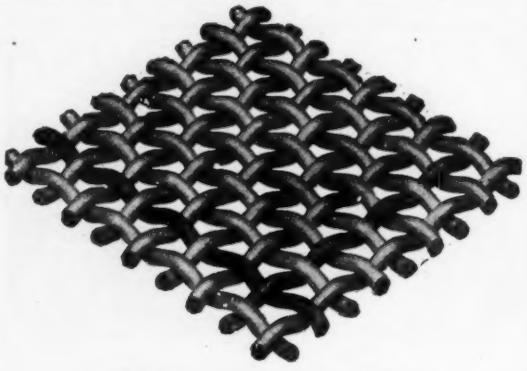
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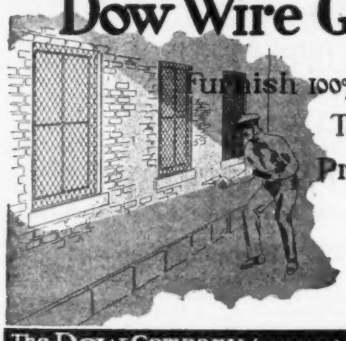
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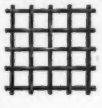
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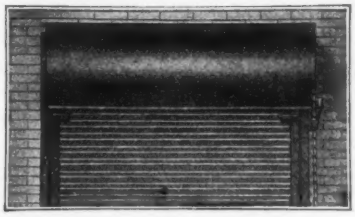
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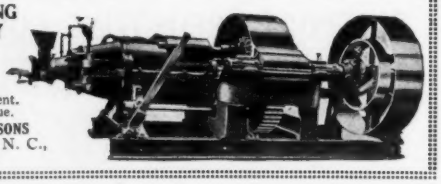
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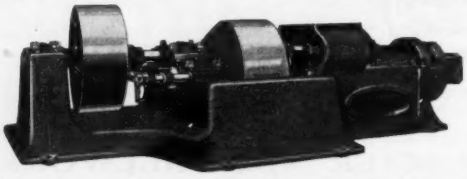
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They are good, they are bad, they are weak, they are strong,
Wise, foolish—so am I.
Then why should I sit in the scorner's seat,
Or hurl the cynic's ban.
Let me live in my house by the side of the road,
And be the friend of man."
(Foss)

Don't you like that, especially along about now when the Christmas Spirit is in the air?

Yes **"The Christmas Spirit"** who came to see old Scrooge that night. I always read Dickens' "Christmas Carol" every Christmas. Don't you? Go do it.

Well, Old Tee Square, this is just "Old Hook'er's" way of wishing you a Merry Christmas.

We've been a-sasain' and a-slammin' away at you all year. Haven't we?

But you knew all the time we didn't mean it. It was only our way of hammering ourselves into your consciousness And we have succeeded.

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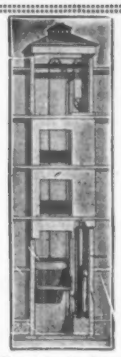
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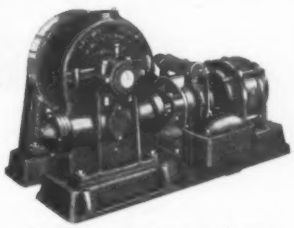
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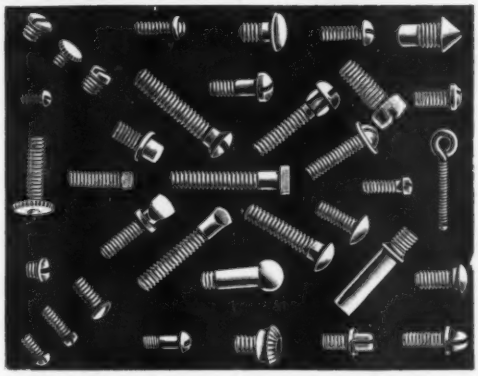
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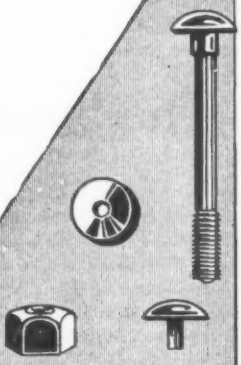
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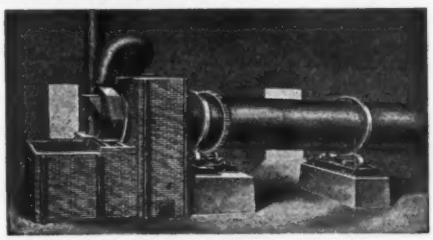
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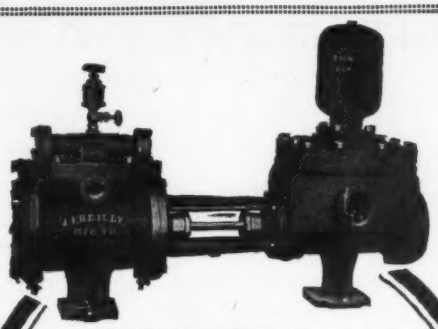
OUTLINE OF CONTENTS

Summary of Southern Progress Since 1880
Summary of the Country's Progress Since 1880
Area of the South, Square Miles
South's Area in Acreage
Altitudes in the South
Population of the South
Forty Year's Growth of Southern Cities
Cotton Industry
Manufactures 1860
Disposition of Commercial Cotton Crop
Pig-Iron Production
Coke Production
Mines and Quarries
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South in Invention
Lumber Cut
Value of Cotton vs. World's Gold and Silver
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Railway Mileage
Navigable Length of Southern Waterways
Commerce at Southern Ports—Exports
Commerce at Southern Ports—Imports
Financial Resources of the South
National Banks
Estimated True Wealth of the South
Assessed Value of Taxable Property
Swamp and Wet Lands
Expenditures for Common Schools
Negro Schools in the South
Assets of Individual Southern States
Condensed Facts About the South

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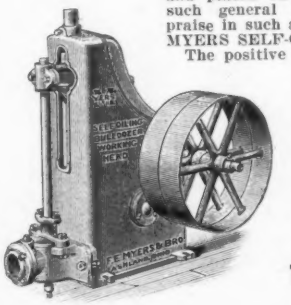
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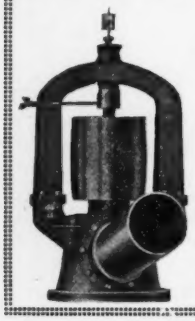
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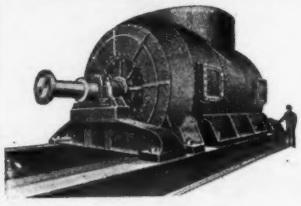
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Fig. 267
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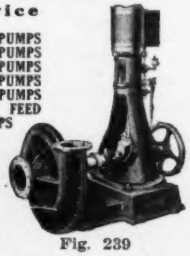


Fig. 239
ENGINE DRIVEN CONTRACTORS PUMP

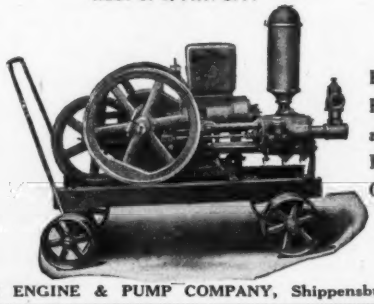
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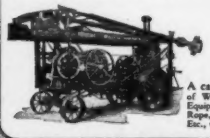
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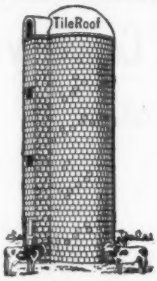


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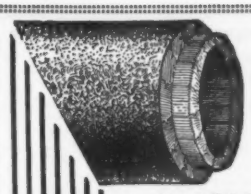
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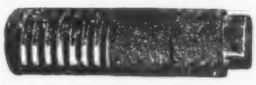
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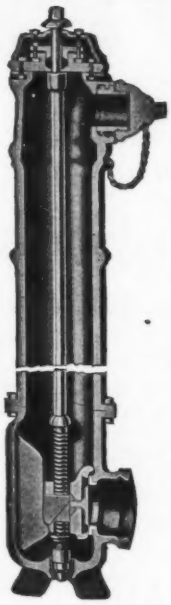
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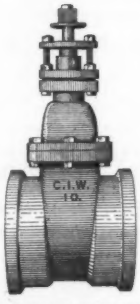


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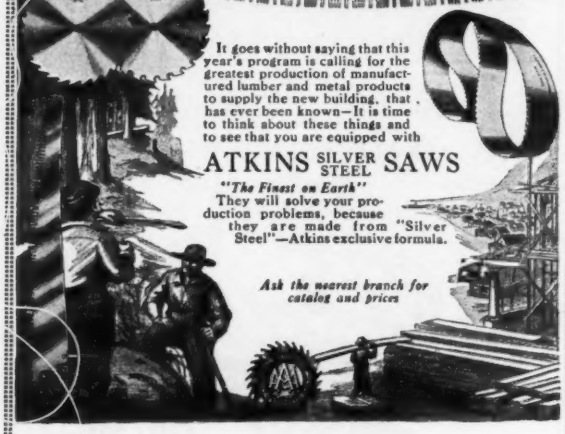




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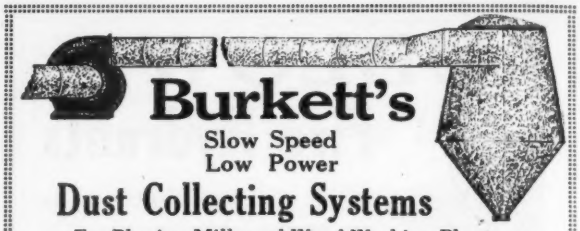
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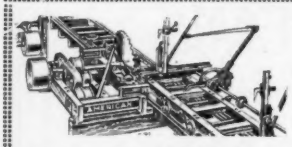


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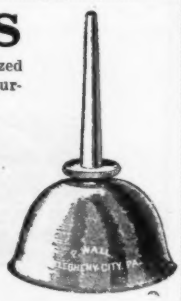
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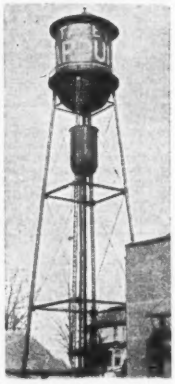
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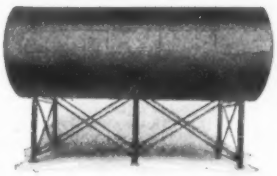
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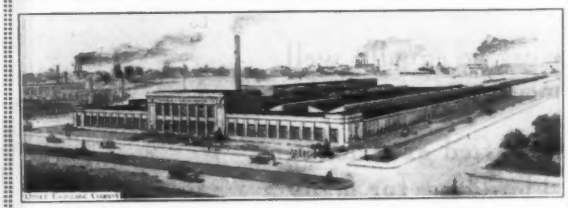
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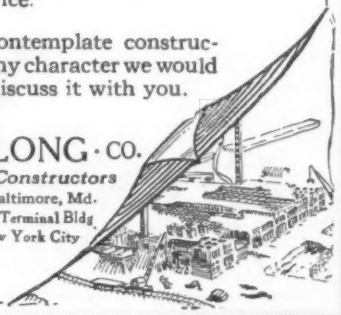
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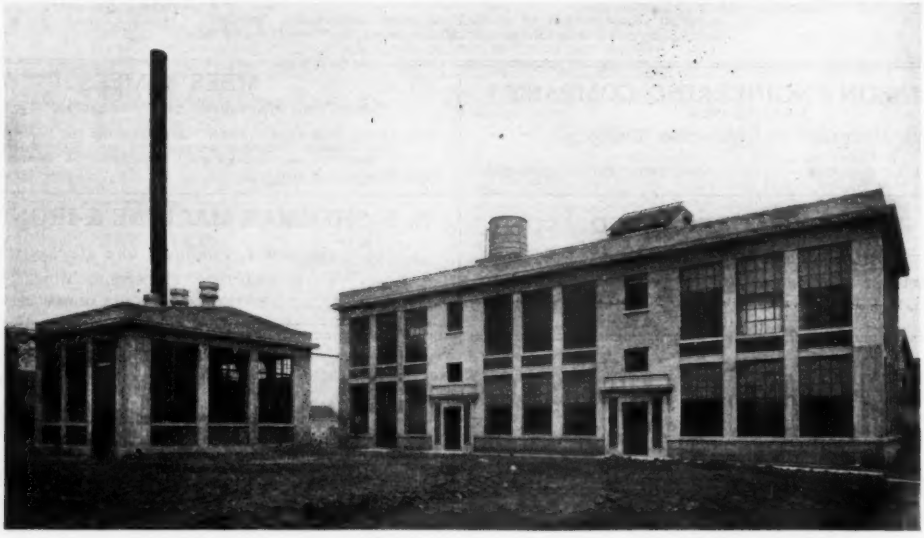
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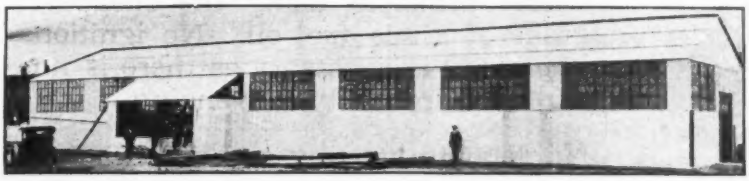
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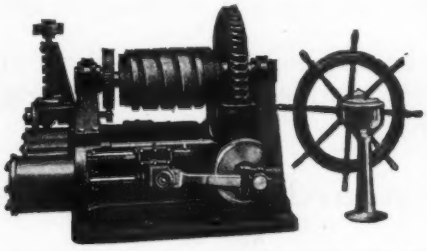
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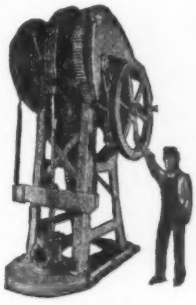
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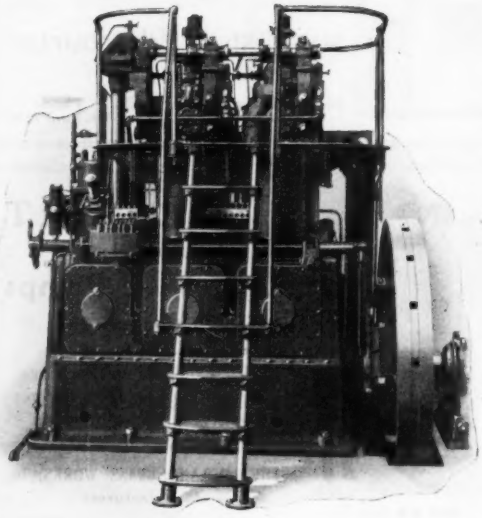
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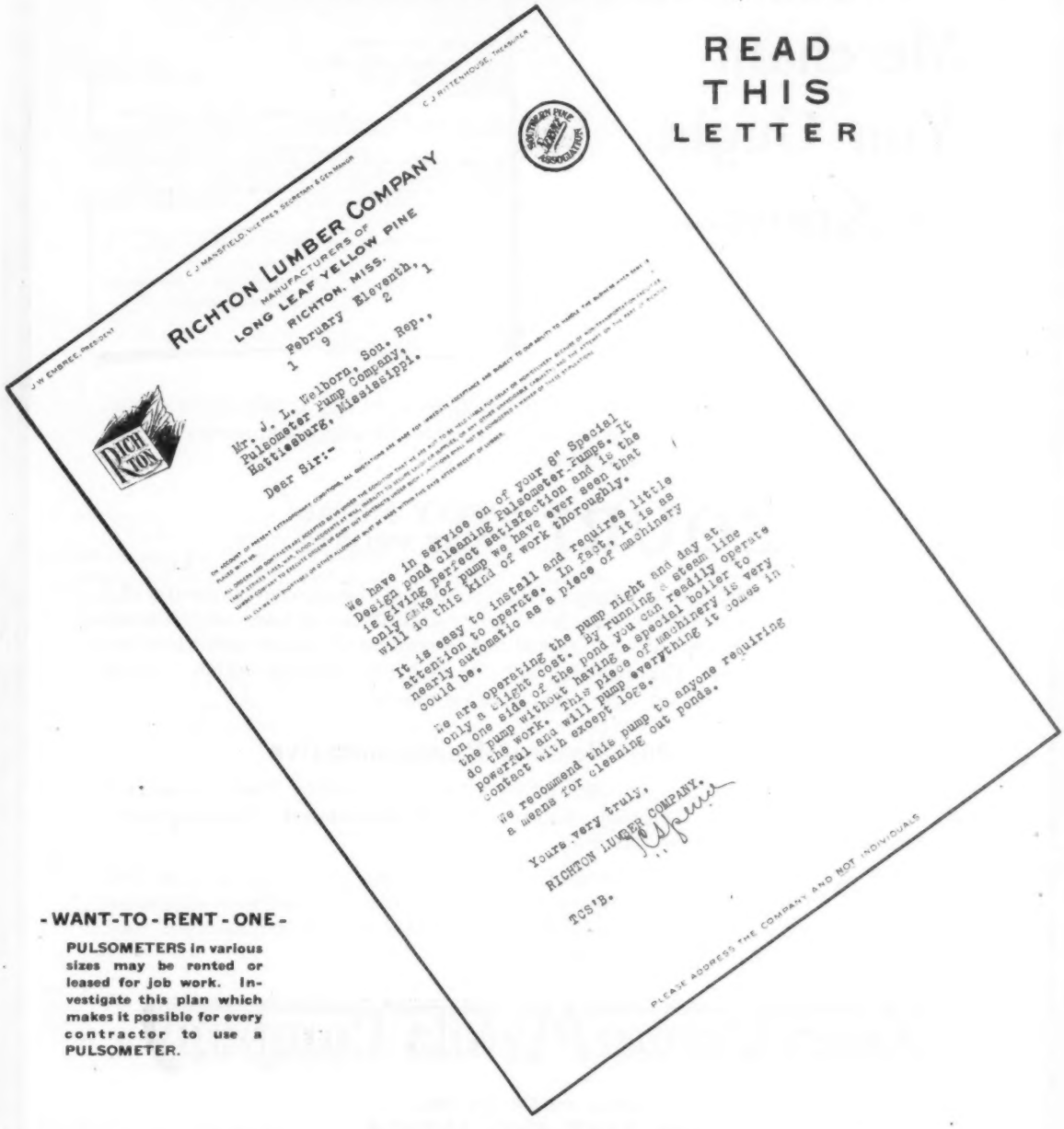
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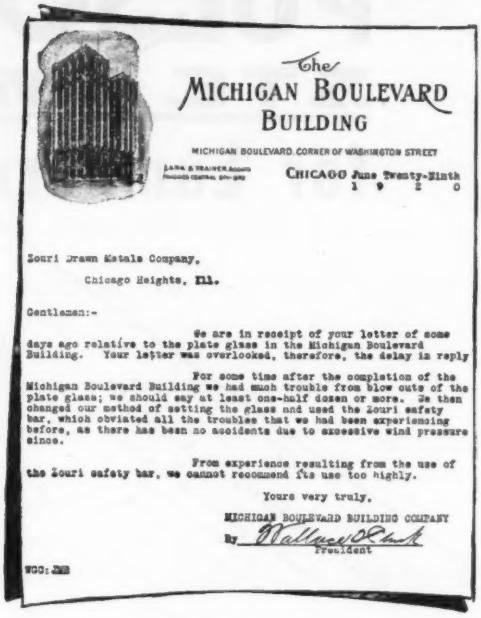
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Manufacturers Record

Exponent of America

DECEMBER 22, 1921.

Volume LXXX Number 25

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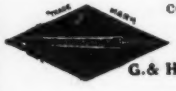
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In order to avoid delays all correspondence pertaining to news or advertising matters should be addressed directly to the Manufacturers Record, Baltimore, Md., and not to individual editors, officers, employes or any branch office.

A DANGER AHEAD.

IN a letter to the MANUFACTURERS RECORD Mr. Charles W. Howard, Manager of the Industrial Board of the Chamber of Commerce, Chattanooga, says:

"Your exposure of the method of the Federal Reserve Bank has taken no less courage than it did to break the Hindenburg Line. Comptroller Williams saw the injustice of it, fought against it and today he is a marked man among the banking interests. The story told in your December 1st issue, page 81, 'Can Such Things Be Done In Free America?' reads like some of the Kennan stories of Russia in the early 80's.

"If the present Congress fails to pass banking legislation, we are going to swing too far over in the other direction, and when we try to correct what we are now suffering under, we will undo much of the good that has been accomplished through the bill and will destroy its future value and substitute another experiment."

IOWA BURNING CORN FOR FUEL.

A DISPATCH from Pocahontas, Iowa, says:

"The board of supervisors of Pocahontas county have ordered the county auditor to buy corn for use as heating fuel this winter in the courthouse, county home and insane infirmary. This is the first official action taken in Iowa calling for the burning of corn instead of coal."

Based on present conditions, the Iowa people cannot be blamed for burning corn for fuel. It is cheaper at the present prices of corn and coal to burn corn as fuel in Iowa. For the same amount of money they can get a greater amount of heat, and because corn is a foodstuff is no reason why under present conditions the people of Iowa should not save themselves from suffering from the cold by the use of corn as fuel. It is, however, lamentable that such a condition of affairs exists. It is a reflection of the first magnitude upon the financial system which has brought about such a condition.

THE CHIEFLY IMPORTANT THING IS THAT FORD SHALL GET MUSCLE SHOALS PLANT.

HENRY FORD is probably wrong when he says that gold is the cause of war. The lure of wealth undoubtedly breeds trouble, but this would be true whether the visible evidence of wealth happened to be gold or a form of money based on some other unit. "Money" as the root of evil does not mean a particular kind of money. Men fought for possessions long before there was any such thing as coinage.

We have seen a report to the effect that Mr. Ford is willing to accept non-interest-bearing bonds in connection with his Muscle Shoals proposal. If he is willing to accept such bonds and complete the enterprise, we do not know that it is within the mouth of anybody to object. It is not a new suggestion. Years ago a large contractor expressed to this newspaper the thought that the Government, in undertaking internal improvements, should pay for them with bonds that bore no interest.

A chief idea of Mr. Ford appears to be that actual currency based on the energy developed by such an improvement as that at Muscle Shoals would be backed by a fundamental earning power inherently better as a basic unit than gold itself. There is nothing so very startling about this theory. Fundamentally the identical theory underlies our issuance of Federal Reserve notes. These notes are issued, in theory, to cover a business transaction in process of completion. A bank makes a loan on cotton, it then rediscounts the note and gets Federal Reserve notes in exchange. When the cotton loan is paid, the notes are retired. It is nothing more than the employment of a taxi to lift a business load from one spot in time to another spot in time—from September, say, to April.

Suppose $1,000,000 in currency were issued based on the earning power of Muscle Shoals. Suppose the unit earned (not total) $100,000 each year, which would be turned into the Treasury and $100,000 of the currency retired. In ten years the entire issue would have been called in. In principle, this is nothing more than what normally happens in the case of a Federal Reserve note, except in the element of time. As to the safety of the earning power, danger from earthquakes, industrial paralysis, etc., the risk would be no greater, with a number of projects, than is usually taken in the case of a note.

The significance of the Ford proposal, however, does not lie in the likelihood of its acceptance. Rather may it be interpreted as an indication of the growing conviction of a number of business men and economists that the time is approaching for a serious, very deliberate and exhaustive study of the whole system of currency, in accordance with modern concepts, with the idea of discovering whether or not the system which was sufficient for the requirements of our ancestors may not, perchance, be inadequate in the present day and generation. Mr. Ford feels that something is wrong, and that is just the way numbers of other people think. But to attempt at this time to diagnose the disease

completely and offer a new system that would be perfect or an improvement would be a rather daring undertaking.

There are no substitutes for the positive virtues of honesty, energy, hard-working and providence. A nation cannot be made rich by edicts and when money is made so easy that anybody can get it in quantities it will be correspondingly worthless. But there is a great deal of difference between easy or fiat money and a money system so attuned to the necessities of the age that the deserving man is not unduly penalized, and so administered that no set of men can arbitrarily manipulate the system so as to bankrupt the weak and multiply the riches of the wealthy. Sound money and democracy are not contradictory conceptions. The idea is growing that perhaps the very concept of money, as the bankers know it, is antagonistic to the theory of democracy as practised in the United States. There is too much of a tendency to employ control of credit as an instrument of general discipline.

This newspaper will never advocate any system of money that is not thoroughly sound, but we have only contempt for those who imagine that the gold standard or any other standard is so sacred that discussion of it is heresy. There is reason to believe that it will be positively beneficial to the world today to discuss money with as entire freedom as the tariff or any other issue is debated. We want truth through knowledge, not satisfaction or complacence through ignorance. There is neither manhood nor freedom in idolatry.

The important thing to the nation, just at this time, is not how Henry Ford will finance Muscle Shoals, but to see to it that his great purpose there is not frustrated by the machinations of politicians or selfish interests. If he can do with Muscle Shoals one-tenth of the things he and Edison say can be done, his enterprise there may be worth to this country and the world, as an object lesson in material accomplishment, more than the cost of the whole war. And the only way in which the vast debts of the world are likely to be paid is through the creative genius of such men as Ford and Edison, who have translated great dreams into equivalent accomplishments and have proved that one brain may create more than can tens of thousands of acres of land.

WHO GOT THE PROFITS?

IT is announced with jubilation that the rise in market quotations for Liberty bonds has increased the value of those bonds by approximately $2,000,000,000.

Who gets the profit?

Two years ago, when Governor Harding and his associates on the Federal Reserve Board were strangling credit everywhere and literally compelling small holders to dispose of their bonds at ruinous prices, a prominent Baltimore banker, in defending the action of the Reserve Board in advising that loans on Government bonds be called, wrote to the editor of this newspaper that it would be better for the country when all of the bonds had fallen into the strong boxes of the big institutions, big estates, insurance companies, etc.

As recently as September, Secretary of the Treasury Mellon wrote to a gentleman in Atlanta to say that only the inexorable laws of economy could better the price of Liberty bonds, and that no edict or policy could change their price. They must rise gradually.

But what has happened? Why, the Federal Reserve Board, at the command of the Administration, lowered the rediscount rate. Each time the rate was lowered, up rose Liberty bonds—and all other bonds. There is not an honest bond broker in the United States today who will not state positively that the rediscount rate fixed by the Federal Reserve banks virtually determines bond prices. If the rediscount rates went back to 7 per cent tomorrow, the price of Liberty bonds would again go below 90, and everybody knows it.

We thus see deflation in its cruelest feature—stripping the people of their honest savings both going and coming. Deflation forced weak holders to sell their bonds. Then the policy of deflation is softened and a condition created where "the strong" can take their profits. And they have taken them in abundant measure.

This is not only immoral, but it is positively dishonest. It is the sort of thing that shatters faith in government. It is the food on which Bolshevism and anarchy feed. The soundness of a financial system does not depend solely on the amount of gold held in reserve. It depends far more on the confidence of the people in the wisdom and honorable intent of the authorities who direct the system. It may be that money has been made sound by piling up the gold reserve (the soundness, in fact, was never imperiled) but did the end justify the means? Did it pay to loot the pockets of citizens in order to pile up an unnecessarily vast gold reserve? Does dishonesty, to put it bluntly, ever pay in the long run?

POSSIBILITIES FOR EVIL IN UNREGULATED ORGANIZED LABOR.

FORMER Governor Ben W. Hooper, of Tennessee, is a member of the Railway Labor Board. He is quoted as saying, in an address in New York:

"I am profoundly awed when I contemplate the posibilities for evil if organized labor is to be permitted to throttle individuality, destroy initiative, exalt inefficiency, dominate management, limit production, ignore the rights of the public and set up a class government."

Governor Hooper is not opposed to organized labor. He is opposed to the kind of organized labor which has been conspiring to enslave the United States. "In my judgment", says Governor Hooper, "the survival of this republic depends upon the wisdom with which this question is handled."

Never in all our history has the price of liberty been more obviously vigilance and yet more vigilance. Every victory of selfish organized labor emboldens it to further encroachment on public rights. Its leaders, the New York investigations show, have in many cases seized despotic authority and sold that authority for money. They have not only held up and betrayed the public, but they have even betrayed their own membership. Think of it! the country is filled with men who make a living by going from town to town stirring up trouble and closing down factories by inciting strikes. The more trouble they stir up the more sure they are of holding their jobs.

Aside from such features as bad management and occasional bad financing, the railroad question is fundamentally one of labor. Are the transportation facilities of the United States to be considered an inexhaustible treasury into which organized labor can put its paws and extract what it will, or are these facilities a national asset for the promotion of business and prosperity through efficient service, this service to be rendered at a cost sufficient to earn a fair interest on the investment and to pay labor wages equivalent to what men of equal abilities would be able to earn in other fields of endeavor? The Government has avoided Government ownership only to establish an unofficial dictatorship over the railroads in organized labor. If the whole process has not been unconstitutional, it has certainly been political and economic madness.

Let not him who is houseless pull down the house of another, but let him work diligently and build one for himself, thus by example assuring that his own shall be safe from violence when built.—Lincoln.

Christmas Day.

ALL history, from the day when Adam and Eve were driven by the power of sin out of the Garden of Eden, has been, as it has been said, His-story,—the story of Him whose birth was heralded by the angelic choir to the shepherds who tended their flocks on Judea's plain 1900 years ago, in heavenly music such as earth had never before heard.

With prophetic vision men had pointed to the time of His coming. Through all the ages all things converged to the birth of a Redeemer from sin for mankind; and since then all human history has diverged from that birthday and from the cross of Calvary. Upon that one central fact in the world's history the world's best literature has been written; the world's best songs have been sung; the world's greatest poems penned; the world's greatest paintings limned; the world's greatest statues carved; and even in things of business wherever and whenever B. C. or A. D. appear in chronological statements, the whole race testifies in one way or another to the supremest event in the history of mankind, and perhaps the supremest event in Heaven's plans, or which will appear so long as eternity lasts.

Wipe out, if it could be done, the paintings based upon the birth and the death of the Son of God; blot out the books that have been written, the poems which have inspired the highest thoughts of mankind, the statues which have been carved by the greatest sculptors of the world, and you would practically destroy the best that is in every art gallery and every library.

Astronomers tell that they can now count more than 300,000,000 stars, and that one of them has a diameter of 3,000,000 miles as compared with the 8000 mile diameter of the world we inhabit; that light traveling at the rate of 180,000 miles a second takes more than 2000 years to reach us from some of these distant worlds. What beings inhabit these worlds, which are without number, we know not, nor shall we know until we have "crossed over the bar" and taken our places among the immortals who are to live through the ages which are without beginning and without end. The Creator of these worlds, from whose hand they were launched into space, by whose command they sweep through eternity and sing their endless "music of the spheres", came to earth, was born in a manger, and died upon the cross to bring redemption from sin to mankind.

On Sunday next the thought of much of the world, even of the people in the nations who do not accept the miraculous birth and the death upon the cross, will center around that one supreme event, and in hundreds of millions of human hearts there will be a new tenderness, a new consecration of life to the welfare of others, a new love for little children, a new passion for the betterment of their fellowmen. The music made by the heartstrings of mankind, as touched on that day by Divine power, will be somewhat akin to that Heavenly music heard by the enraptured shepherds when the angelic chorus sang:

"Glory to God in the highest, and on earth peace to men of good will."

SOUTH CAROLINA BANKERS CALL UPON CONGRESS TO CONTINUE THE WAR FINANCE CORPORATION.

FROM a South Carolina banker we are in receipt of a letter in which it is said:

"I attended last night in Columbia a group meeting of the South Carolina Bankers Association. This meeting was one of the most largely attended ever held in the state. The subject of conversation in every group you approached in the lobby was the policy of the Federal Reserve and the wreck and ruin it has wrought; and I have never heard a more severe criticism or denunciation of any policy of any institution than was made by many of the bankers, who some few months ago were absolutely 'mum' on the subject.

"I am sending you copy of a resolution passed by the group. You will note that the passage of this resolution plainly shows that the bankers realize that the Federal Reserve System fails to furnish them with the necessary finances for the operation of their business. This is really an indirect slam at the Federal Reserve. This resolution was passed by a rising vote. I spoke briefly before the bankers and rather expected them to take issue concerning my position as to the cause of the present distressing financial conditions. However, I found that they were practically unanimously in accord with my views, and if there was any difference of opinion no one so expressed it.

"After the meeting I had many bankers from various sections come to me personally and tell me that they admired your course, and that time had brought to light the fact that you were absolutely correct in your fight against the damnable deflation policy enforced by the Federal Reserve. Many of the small bankers reiterated over and over again: 'The Federal Reserve is a great instrumentality in the hands of Wall Street, and is being used solely for the purpose of the great money powers. It will require at least ten years to enable our customers to overcome the fearful burdens which have been forced upon them. It is our judgment that the farmers are not responsible for their predicament. They were caught in a trap, and it will require a long lapse of years to enable them to slowly discharge the fearful losses which have been forced upon them.'

"Recently I have been thrown with bankers in several different meetings, and I have never seen a greater change in sentiment than the views now held by bankers in regard to the MANUFACTURERS RECORD; they at first thought you were wrong. It is now an exception to find a banker who is not outspoken in his approval of the course of the MANUFACTURERS RECORD in its fight against the deflation policy of the Federal Reserve."

At this meeting a resolution was passed by a rising vote urging that the War Finance Corporation be perpetuated because of the great work it is doing to save agriculture. The resolutions were as follows:

Whereas, the enactment of the Agricultural Relief Bill by Congress, as an amendment to the law creating the War Finance Corporation, has provided a system of short term finance for farmers at reasonable rates of interest, which is proving of incalculable value to the agricultural interests of the nation; and

Whereas, the distribution of such loans through the War Finance Corporation is made available for the handling of agricultural paper through the banks of the country, co-operative marketing associations and other organized financial agencies; and

Whereas, owing to the longer periods required for production and orderly marketing of farm products the present system of short term commercial banking is not suited to the needs of farmers, as it requires from 12 to 18 months time for a turn-over of their staple crops, and

Whereas, the present Federal Statute provides that the operations of the War Finance Corporation shall cease to function on July 1, 1922, thereby stopping its beneficial effects to the farmers of the nation; therefore be it

Resolved, by Group Seven of the South Carolina State Bankers Association in session at Columbia, S. C., December 9, that the President and Congress of the United States be and they are hereby earnestly petitioned to enact a law during the present session of Congress permanently ordaining the operations of the War Finance Corporation or similar agency, to the end that provision may be made for the proper financing of American farmers in the production and orderly marketing of staple agricultural products and livestock; be it further

Resolved, that copies of the above and foregoing preamble and resolution be mailed to President Warren G. Harding and the Representatives in Congress from South Carolina.

FORD AND ALUMINUM.

AS Henry Ford proposes to build an aluminum plant at Muscle Shoals, if he secures that property, will he have any quiet but powerful opposition from the Aluminum Company of America, which it is generally understood is controlled by Secretary of the Treasury Mellon?

We know that some aluminum interests have from the beginning vigorously but probably anonymously fought Mr. Ford's proposition. We hope that Mr. Mellon will make it very clear that he has not and will not oppose Ford as a possible rival in aluminum production.

A WARNING TO BANKERS.

THE ink was scarcely dry on the editorial of last week's issue advising the bankers of the country not to declare extra or unusually large dividends this year, before the Wall Street Journal published a statement that American banking institutions are to a large extent not only declaring regular but extra dividends. Our warning to the banks was not to declare extra dividends unless they were willing to bear the opprobrium which would inevitably come upon them if they prospered while all other interests are suffering in direst poverty.

The profiteering in money, through the exorbitant rates that were fixed by the Federal Reserve Board, cost the agricultural and business interests of this country a good many billions of dollars and created a hostility to the whole banking system as it now exists, but which bankers do not seem to appreciate; nor do they realize the danger which they are themselves creating.

The Wall Street Journal says that large banks in New York, Chicago and Philadelphia declared their regular and extra dividends last week, and that others will probably take similar action before the year ends. It says:

"Present bank dividend action is in direct contrast to that of many other businesses."

This is pre-eminently true, and the people of the country—and by that we do not mean the socialists and the bolshevists, but the intelligent, thinking business people of the country—are beginning to resent a profiteering in money through the fact that the Federal Reserve banks are provided with money by the United States without the payment therefor of a dollar of interest, and out of this the Federal Reserve banks have been making enormous profits and enabling the strong banks of the country to do likewise, while the weaker banks have had in many cases a hard and desperate struggle to maintain themselves under the adverse conditions prevailing in the agricultural interests.

As the agricultural interests have been largely crucified by the work of the Federal Reserve System, so the smaller banks which have catered to the needs of the agricultural districts have in many cases greatly suffered, and many of them are now in almost as dire need as are the farmers themselves. But many of the larger financial institutions in the big centers of the country have been reaping unwonted profits.

The Wall Street Journal also calls attention to the fact that bank shares have recently soared in price from 10 to 50 points within a few weeks. If bankers are wise in their day and generation they will not encourage the idea of large profits made during the past two years.

Revelations Which Affect Every Man in America—Building a Banking Palace in New York At the Expense of the Country.

THE $25,600,000 estimated cost of the Federal Reserve Bank building now being erected in New York is an amazing illustration of the methods which have prevailed in that organization and typical of the unwisdom of the management of the whole Federal Reserve System during the last few years. As the final cost of all buildings largely exceeds the preliminary estimates, it is quite probable that the cost of New York's palace of banking for the Federal Reserve Bank of that city will far exceed even the $25,600,000 now given in official figures as the estimated cost.

In an exceedingly illuminating and invaluable discussion of this whole situation in a letter to Hon. L. S. Overman, United States Senator, former Comptroller of the Currency John Skelton Williams presents an array of facts and figures in connection with this bank building, and of other things connected with the management of the New York Bank, which should arouse the country and cause the Administration and Congress to get rid of every man in the Federal Reserve Board, or in the Federal Reserve banks, in any way responsible for the conditions which have been brought about by their methods.

In his letter to Senator Overman Mr. Williams reviews the recent report of the Federal Reserve Board in reply to his criticism of some of the things done by the New York Federal Reserve Bank. He points out that the Board admits to an estimated cost for the land and building of $25,646,409. He adds that the Reserve Bank authorities were perhaps ashamed to exhibit this reckless use of public funds, and in trying to reduce the book value "they have already charged off for alleged depreciation the sum of $1,989,505 to profit and loss as shown by their own report." Their excuse for doing this was the demolition of the old buildings formerly standing on the ground on which the new edifice is to be built, but the effect of that charge-off is to deprive the United States Government of nearly $2,000,000 which otherwise would have gone into the Federal Treasury from the New York Reserve Bank's net earnings.

The New York Reserve Bank, says Mr. Williams, for its work in connection with the handling of Liberty Bonds—and it has generally been understood that the banks of the country did their Liberty Bond work out of patriotism and without remuneration—was paid by the Federal Treasury $12,000,000 on account of expenses claimed as fiscal agents, & etc., in connection with the Government loans.

Mr. Williams points out that as shown by the official report "the fees to be paid to the architects and engineers are estimated at $1,106,000, an amount which would be sufficient to provide ten post office buildings at $100,000 each in ten towns and cities where they are greatly needed."

He states that the contract for the foundation of the new edifice "has been let to a leading contractor in the country for a fixed fee," but he says that the report carefully refrains, as far as he can see, from giving any intimation as to what that fee amounts to but that he has been told that the lowest estimate as to the cost of the foundation alone is $1,838,000.

He calls attention to the fact that with a fee of $1,106,000 for the architects and engineers who have planned this building, the salary of the chief supervising architect of the United States Government, having supervision over the erection of all Federal buildings, is only $5,000 a year.

He points out that the Board's report to the Senate shows that the formal agreement "with the general contractor" for the erection of this temple of banking was executed on January 25, 1921, and that while the Federal Reserve Board was sanctioning these vast expenditures, which they now estimate will aggregate the huge sum of $25,646,000, exclusive, as he understands it, of interest and taxes during construction, "the Reserve Banks were **insisting upon the contraction and repayment of loans** in districts where funds were greatly needed for pressing requirements of farmers and merchants." * * For example, from Jan. 21, 1921 to Feb. 28, 1921, the contraction in the loans of the Federal Reserve System amounted to $119,000,000, and the contraction has been kept up steadily from that time to this.

From the further discussion of this subject we take the same extracts, regretting that limitation of space makes it impossible to publish in full this letter, which throws such light upon the methods of the Federal Reserve Board and its banks as surely to startle the country with a realization of the fact that this entire nation has been under the domination for the last few years of the most autocratic, reckless power in control of our finances, and thus our business, which has ever been known in the world's history. If those who have criticized the MANUFACTURERS RECORD for its position, or who have upheld the Federal Reserve System without understanding its methods, will read with care the facts presented by Mr. Williams we are sure that they will give to him credit for doing a work of immeasurable good in making these facts known and credit to the MANUFACTURERS RECORD for its unceasing fight against its management. How long, how long will President Harding permit these men to control our financial destiny? President Wilson made a great mistake in their selection, but President Harding, after seeing the disastrous results of their work, is making a still greater mistake by permitting them to remain in office. In the course of his letter to Senator Overman Mr. Williams said:

"It is a sad commentary on the wisdom and humanity of the Reserve Board's policies to find at the very time that the New York Reserve Bank was being authorized to spend up to $25,646,409 for a luxurious bank building, with its clubs, gymnasium, baths, restaurants, etc. etc., the total amount of money which six of the twelve Reserve Banks were lending in eighteen States, including all of the New England States, the States of New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, West Virginia, Ohio, Kentucky, North Carolina, South Carolina, Arkansas, the greater part of Missouri and parts of Illinois, Indiana, Tennessee and Mississippi, on "AGRICULTURAL" and "LIVESTOCK" paper amounted on January 31, 1921 (Reserve Bulletin March 1921 p. 354) to only $17,167,000 which is scarcely two-thirds as much as the sum appropriated for the palatial bank buildings in New York City, and while the money was being appropriated for those buildings, the pressure on farmers and merchants for the repayment of their loans was being exerted right and left. The actual contraction in bills discounted and paper purchased by all twelve of the Reserve Banks in the three months of great need, from November 19, 1920 to February 18, 1921, amounted, as the official figures show, to $417,000,000.

"In my letter of October 24 last to Mr. George Foster Peabody, a director in the New York Reserve Bank, I called attention to the significant fact, not creditable to the Reserve Bank's management, that following my criticisms of extravagance, the officers of the Reserve Bank while reducing as of October 1, 1921, the salaries of practically all of their employees earning $2000 or less: had not reduced their own salaries. The officers of the Bank had gotten the biggest

increase, in several instances more than 500%, and they were still drawing their excessive pay.

"I take the liberty of quoting the following extracts from my letter to Mr. Peabody:

"The New York papers of October 1st printed a circular letter signed 'Benj. Strong, Governor' addressed 'to the employees' of the Federal Reserve Bank of New York notifying them that * * * it appears that a continuance of quarterly payments of extra compensation is no longer justified. You are advised, therefore, that such payments are now discountinued, and that no payment for that purpose will be made for the quarter ending September 30, 1921.

The action anounced above is the inevitable consequence of general economic developments during the past months with which all of the employees are familiar.'

"But as far as the public is informed the 'familiarity' of the officers and directors of the New York Reserve Bank with 'economic' developments of the past months' has not yet induced the officers drawing $30,000, $40,000, or $50,000 to scale their own salaries, the curtailment of compensation it appears applied only to employees who are receiving an average of less than $2,000 a year salaries, with which to support themselves, their wives and children. "As illustrative of the healthy effect of publicity in the matter of salaries I will mention a case which came under my observation as Comptroller of the Currency. I discovered that a certain banking institution, a member of the New York Reserve Bank, was paying to its chief executive officer a salary of $75,000 per annum, and as I had reason to believe that this was without the knowledge of some of his fellow-directors as well as the other stockholders of the bank, I instructed the bank examiner to bring the subject to the attention of the full Board of Directors, with the result that the extravagant salary was promptly reduced to $37,500, and subsequently to zero, but the official still clung to the office. * *

"This (salary schedule, New York Reserve Bank) seems to me to be a scandal and a shame which can not be cloaked even by the sanction of Mr. George Foster Peabody, justly respected as you are. It seems to me to be especially outrageous while we are demanding that working people, farmers, merchants and manufacturers accept reductions in their wages or practically extinction of profits in their business, and while the evil forces of unrest and destruction are seeking pretexts on which to stir resentment against the Government and conflict between classes. These forces need no more powerful appeal to prejudice and hate than the fact that one department of the Government is reducing the wages of railway employees and another department jumping salaries up to $30,000, $40,000 or $50,000 a year, on the plea that the person favored is indispensable to the life of the Government or one of its institutions! * *

"If we assume that conditions justify the Government in reducing the pay of railway men and giving them the choice between accepting the reduction and seeking other employment, the same conditions surely would justify the like course toward Reserve Bank employees paid far more than we allow a Cabinet Officer, a Justice of the Supreme Court, the Lieutenant-General of the Army, a Senator, a Representative, or the Vice-President of the United States."

"It should be stated that although I received from Mr. Peabody a note indicating his intention to reply to my letter, quoted above, he has NOT done so up to this time, although six weeks have elapsed.

"The official report of Congress show that the total appropriations on account of public building projects throughout the entire country under the control of the Treasury Department, including Post Office buildings, Customs Houses, Internal Revenue buildings, etc., **have never, for any year in the past 20 years, amounted to as much as the Federal Reserve Bank of New York is now expending for these costly banking quarters in the Wall Street District.**

"In fact, the total appropriations by Congress for the construction of post offices, customs houses, etc., in all 48 states of the Union for the past 20 years, since 1901 inclusive, only averaged $10,969,776 per annum, or less than one half of the proposed expenditure for its buildings de luxe by this one bank.

"Should this Bank property—land and buildings—be taxed at what the Senate is officially informed is its estimated cost, of $25,646,409, at the present tax rate, the Bank's TAXES, which last year were reported, including fire insurance at only $3328 will be raised over 21,000%—to the sum, exclusive of the fire insurance, for this tax item alone, of $710,405. My information is that such property in New York is assessed on the basis of its actual value. If the officials of the Reserve Bank should persuade the tax authorities that this property, costing over Twenty-five Million Dollars is really only worth, after completion, twenty or fifteen million dollars, in that event the tax bill would presumably be proportionately reduced.

"Of this needless estimated loss of $1,800,000 a year, 90% or $1,620,000 would be at the cost of the Federal Government —a sum equal to much more than the aggregate of the salaries of 96 U. S. Senators.

"Such a waste as this of public funds is rightly regarded as monstrous, and I have, in fact, heard it compared, by well-balanced critics, to the palmy days of the Tweed ring in New York City.

"In my letter to the MANUFACTURERS RECORD, published in the Congressional Record, I gave a list showing salaries I had been advised were being paid to 24 "officers" of the new York Reserve Bank, and in doing so, I said:

"It will be observed that these salaries have been increased in numerous cases from 100% to 500%. I have been told that 60% of these 'officers' never received over $1500 to $2500 before they came to the Reserve Bank, but they are now drawing salaries as high as those paid to Cabinet Officers."

"The official statement now furnished by the Board shows that my statement was ultra-conservative, despite Governor Strong's childish quibbling and misleading attempt to misinterpret or distort it in his published letter to the Reserve Board Governor of October 6, 1921. Instead of there being only "24" or "30" of these so-called "officers" and publicity experts", the report just sent to the Senate admits a total of 40 "officers" employed by the New York Reserve Bank as of October 1, 1921, at salaries which aggregated not $447,000, as suggested in my statement, but exactly $509,800, or 14% more than I had charged.

"An analysis of the Reserve Board's statement pages 125-6-7 shows that of the 40 "officers" of the New York Reserve Bank on the payroll October 1st last, 24—which is exactly 60% of the 40 "officers"—were clerks, whose initial salaries with the Bank, or whose salaries previous to entering employments of the New York Reserve Bank (taking the lower figures in each instance) ranged from $1,000 to $3,000 per annum, and that the average of those salaries was only $2,198 per annum—materially less than the "$2500" figure mentioned by me. If we add to these 24 "officers" listed, one other, whose initial salary as law clerk to the Reserve Board at Washington was $3,600 per annum, the average salary of these 25 "officers", at the time of their employment or just before their employment by the Reserve Bank, will be found to have been $2252 per annum, a total for the 25 men of $56,300 per annum.

"These same "officers" on October 1, 1921, were drawing from the Federal Reserve Bank of New York in salaries an amount aggregating $334,700 per annum, so that these 25 men are now drawing in the aggregate salaries which amount to 594% of the salaries which they drew when they first came to the New York Bank, or immediately prior to their employment by that bank and the average of all was more than the salaries of Cabinet members.

"The Reserve Board's report also shows that of the "24 officers" named by me in my published letter (out of the 40 employed by the Bank) the salaries of exactly 50% of them, about the time they came to the Reserve Bank did average not exceeding $2500—some of them much less than my

figures—substantially confirming the figure originally given me and published by me, which Governor Strong so unfairly attempts to criticize; and furthermore the present salaries of those same 24 "officers". the Board admits is $3400 more than listed by me; also sixteen of the bank's "officers" are now drawing as much or more than Cabinet members, and 26 of them as much or more than United States Senators—"one of them as much as SIX Senators," as stated by me.

"The list of "officers" submitted to the Senate shows one instance where a bank clerk who was only getting $3000 per annum after 26 years employment by one of the New York banks, had been advanced to $22,000 per annum in the New York Reserve Bank.

"Another man who was receiving $6500 from one of the New York banks with which he had been for 24 years has been advanced by the New York Reserve Bank to $30,000—more than the combined pay of Vice-President Coolidge and Secretary of State Hughes.

"In another case a young man employed by the Reserve Board in 1915 or 1916 as a law clerk at $3600, has been made Deputy Governor of the New York Reserve Bank at $25,000—equal to the combined salaries of the Chief Justice and of the Solicitor General—good progress for a young attorney who was wholly without practical banking experience, but whose talents as a member of the "third house" have been frequently invoked by the Board.

"Another clerk, formerly private secretary to a member of the Reserve Board at $2500 per annum, has been jumped to $15,000 by the New York Reserve Bank and is now getting as much as two United States District Judges, or the aggregate salary of two Bishops of two large dioceses.

"Mr. Lins" whose salary, after nine years experience with his former employer, was only $1320 is now drawing as "manager at large" $10,000 per annum from the New York Reserve Bank—the same salary as the Minister to Greece and twice the salary of the Director of the Mint, while another "officer" employed at $2400 by the New York Reserve Bank four years ago is now receiving $12,500, or $500 more than the Secretary of War.

"A former 'advertising manager' for a publishing concern, has been given a $10,000 berth with the understanding that he is to aid in giving 'literary finish' to the Bank's press statements, and has been given the title of 'Manager, Statistics Department'. His salary is twice that of the United States Commissioner of Education and more than twice the salary paid to the chief statisticians of the United States Census Bureau.

"The compensation of still another clerk to whom the Chemical Bank was paying $1100 at the time of employment by the Reserve Bank is now about 500% of his former pay, and he is receiving the same salary as Assistant Secretary of the Navy Roosevelt, while a $1320 clerk taken from a newspaper office is now drawing from the Reserve Bank the salary of the Under Secretary of State of the United States.

"The New York Reserve Bank's "Comptroller of Administration" has been favored with an increase from $2400 to $12,500 and he is now drawing more than the combined salaries of the Treasurer of the United States and the Auditor for the War Department.

"The "Manager, Personnel Service Department"—whatever that may be—was getting, after eleven years previous service with local banks, $1800 a year. The Reserve Bank is now paying him 20% more than the salary of Brigadier-General in the Regular Army or 400% of what he formerly received, and the "Manager, Personnel Development Department," who, after more than 10 years service with local banks was geting at the time of employment by the Reserve Bank $3000 a year has been advanced to the salary of a Major-General or a Rear-Admiral or the United States Consul-General at Buenos Aires.

"These instances are all taken from the Board's report to the Senate.

"A clerk whose salary with a neighboring bank, after five years of service was $1000, has been jumped to $6000—more than the salary of the United States Commissioner of Patents—with the title of "Manager, Methods and Supplies Department." In this connection I will take the liberty of quoting the following extract from my letter of November 2 to one of your colleagues in the Senate:

"In defending his administration Governor Strong of the New York Reserve Bank, cites in his defense the number of economies effected by the creation of the "Methods and Supplies" Department of the Bank:

" 'Of the economies which he says 'resulted from establishment of this department' he mentions 'first' and foremost, and evidently with glowing satisfaction and undisguised pride, the 'installation' in toilet or wash rooms, 'of air-drying equipment, replacing the linen and paper towels formerly used.'

" 'And he mentions 'second', of obviously less importance, the 'establishment of the post office station and elimination of the express charges on shipments of currency and securities.'

" 'These quotations from Governor Strong's official communication to the Reserve Board are suggestive of the operations of his intellect. He omits, however, to inform us whether his 'air-drying' device is applied only to the hands and face or whether it has also been adopted in their elaborate bathing quarters.' How far the faculties of the officials of the Reserve Bank have become air-dried or shrivelled, is not discussed by the Bank's Governor, but it may be reasonably conjectured how far the 'air' has been liberally supplied in inflating the salaries of such 'officials' as Mr. Lins, whose salary as Governor Strong says has been increased since his employment 566%.' * *

"In the New York Reserve Bank's report to the Board transmitted to the Senate, its officers bestow upon themselves unstinted commendation, but their efforts to impress their importance is sometimes amusing. On page 26 we learn that when a plain man wants to reach the "officers quarters" as they are described, he will be required not to pass through ten ante rooms, but to mount aloft to the tenth floor of the building. There, remote from the madding crowd, he is ushered into the presence of the man he seeks, or of his assistant secretary. I do not mean to be disrespectful to the "officers" of the New York Reserve Bank—for some of whom I have a sincere regard, and I trust they will not take offence if I quote at this point the following striking, and not entirely irrelevant, extract from the writings of a distinguished author which I ran across last evening in my library. The historian whose work I was reading, said:

"It is, indeed, difficult to understand the qualities or objects that enlist the devotion and compel the worship of humanity. Travellers in the Orient tell of majestic fanes, whose mighty walls and countless columns are rich with elaborate carvings. Hall succeeds hall, each more beautifully wrought than the other, until the innermost, the holy of holies, is reached, and there is found enshrined—a shriveled ape."

"I do not wish to be understood for a moment as suggesting that the New York Reserve Bank "officers" are either "shrivelled" or that they bear a family resemblance in any respect to their anthropoid ancestors, according to the Darwinian theory—although Governor Strong himself has testified (p. 119 Reserve Board's report to Senate) that apparatus has been installed for "air-drying" them once or twice a day, and it has been observed that their propensities are more imitative than initiative.

"The money spent in unnecessary extravagance this past year was not in the final analysis the property of the New York Reserve Bank—but, by Act of Congress, 90% of those funds if they had not been handed out with such lavish prodigality, would have gone into the Federal Treasury, to

aid in reducing taxation, and the other 10% would have been added to the surplus of the Bank.

"It should also be well understood that the New York Reserve Bank's great earnings were largely made through the use of hundreds of millions of dollars of Federal Reserve notes, which were furnished so freely by the Government, and upon which the Bank paid no interest while it was collecting 6% and 7% interest on loans which it was enabled to make as a result of its possession of those notes. In November 1920 the New York Reserve Bank had outstanding $886,000,000 of Federal Reserve notes, delivered to it by the Government without interest. Incidentally, and by way of parenthesis, the official record contains the seamy story of a case where the New York Reserve Bank, getting money from the Government without interest, loaned it at 6% to a member bank which thereupon loaned to an old customer several hundred thousand dollars at the equivalent of about 200% per annum, on a loan secured by collateral, and repaid in six months. Other instances are mentioned in official records where member banks borrowing most heavily from that Reserve Bank were exacting interest rates ranging from 20% to 100%, from customers at their mercy.

"As to the 'discount operations' of the New York Reserve Bank in the past, these, in my opinion, have been entirely too 'automatic'. Governor Harding of the Reserve Board in testifying before the Joint Commission on Agricultural Inquiry in August last, in response to questions by Senator Lenroot, virtually admitted that loans of 'forty or fifty million dollars' at a time were made to New York banks 'instanter', and I have no doubt the record of the Bank will prove this. In referring to some of these large transactions; especially those secured on Government obligations (although the proceeds may be used for any kind of speculative loans), Gov. Harding said: (page 357 hearings before Joint Commission.)

"There isn't anything in such a transaction that will enable the Federal Reserve Bank to form any idea of just what transactions the member bank is having. * * There is nothing to base an inquiry on and the Federal Reserve Bank has to put the note through instanter or else the member bank which has made the application is deficient in its reserve and subject to penalties."

"Those blocks of 'forty and fifty million dollars' in loans which, from Gov. Harding's testimony it appears were made 'instanter', were used sometimes, as the records will show, for all kinds of speculations and promotions.

"My correspondence with Mr. George Foster Peabody and with the Federal Reserve Board, and the official records, will show, for example—that the banks borrowing most heavily from the Federal Reserve Bank were sometimes loaning their funds largely for use

(A) In speculative deals and operations, in Sugar and Sugar stocks, in Oil and Oil stocks, and other speculation in commodities and industrial stocks.

(B) In promoting the speculations of the executive officers of the borrowing banks who borrowed heavily, both directly and indirectly, from their own banks and from other member banks.

(C) In loans to directors of the Federal Reserve Bank of New York, to one Director over $5,000,000 on highly speculative securities; to another for the purpose of re-lending on Wall Street Loans at fancy rates of interest.

(D) Funds were also loaned most generously by banks borrowing heavily from the Reserve Bank for operations in "copra" and cocoanut oil in the Phillipines or the Strait Settlements and other remote regions, when farmers at home and dealers in cotton and cotton seed oil, and raisers of wheat and corn were being ruined for lack of funds.

(E) And the records show that a bank to which the Federal Reserve Bank of New York was loaning at one time about 100 million Dollars was furnishing funds with which to engineer a notorious "corner" on the New York Stock Exchange, in which corner the President and two Vice-Presidents of the Bank which was enjoying these huge accommodations from the New York Reserve Bank, were largely interested financially. Such evils as these can best be cured, or their recurrence prevented by the sun-light of publicity, rather than by the Lethean ointment of secrecy and oblivion.

"It is also unhappily true, as suggested in my letter to Mr. Peabody that the institutions to which this Reserve Bank was lending most heavily were calling in loans made to legitimate business enterprises while continuing to carry loans made directly and indirectly to their own officers and syndicates in which those officers were interested on highly speculative securities.

"Please note the following figures as to how the funds of the System were being used in certain Districts in November 1920, ten months after my warning.

"Total loans on 'agricultural' and 'livestock' paper by six Federal Reserve Banks (1st, 2nd, 3rd, 4th, 5th, and 8th Districts) to about 4000 member banks covering 18 States and parts of 5 other States (Reserve Bulletin No. 921, p. 112), $25,642,000.

"Loans by New York Reserve Bank to two member banking institutions in that city, both conspicuous for their speculative activities, over $250,000,000.

"The crumbs from Dives' table which the hungry Lazarus was permitted to pick up at that feast were not many.

"It is no excuse for the banks to claim that the New York member banks borrowed in order to lend to correspondent banks, for the record shows that one of the biggest borrowers from the New York Reserve Bank about that time was lending to its own chief executive officer and his immediate family, largely on speculative securities, more money than his bank at the same time was lending to all of its National Bank correspondents in all the 48 States of the Union.

"Economy and efficiency in the operation of the Federal Reserve Bank of New York are, of course, highly important; but the question of salaries paid, however grossly excessive they may be, or the expenditure of $25,000,000 for a palatial bank building are small in comparison with other faults and evils to which I have directed public attention in connection with the management of the Federal Reserve Bank of New York, and the administration of the whole Federal Reserve System by the Reserve Board.

"The unequal, unfair, and unwise distribution of the funds of the Reserve System can spread ruin and bring disaster. The fact that six of our Reserve Banks were lending only $17,000,000 on 'AGRICULTURAL' and 'LIVESTOCK' paper in eighteen States, at the same time that the New York Reserve Bank was going ahead with the expenditure of over $25,000,000 in a banking edifice, is painfully significant.

"When we survey the country and realize the ruin which has come to our agricultural and other interests coincidently with the carrying out of the Board policies, it is clear that is not a small matter. A business man declared the other day with terrible earnestness: 'I had rather have ten panics than one "deflation".'

"The National Banks in New York City were given in proportion to their total loans and discounts a year ago, three times as great an amount of Reserve Bank funds as our 7699 "country" banks were allowed to get in their hour of need.

"It is not a small matter to discover that if our 'country' banks had been given, by the Reserve Banks a year ago, the same proportion of accommodation that was furnished to New York banks, sometimes in blocks of 'forty or fifty million

dollars" at a time, as Gov. Harding expresses it, and to use his language again "instanter," that those "country" banks would have received for the use of the farmers, cattle raisers, industries and business of the country, a thousand million dollars more than was accorded them. What this meant to the country we now realize.

"The official figures tell the tale. They show that the "deflation" in their holdings of "Bills Discounted and Purchased" by the twelve Federal Reserve Banks between October 22, 1920, when farmers and business men were pleading piteously for help or consideration, to November 16, 1921, was 1784 million dollars, and actual contraction from 3050 million dollars in October 1920 to 1266 million dollars as shown in the official statement two weeks ago.

"The peace of the world is of transcendent importance to our country and to every other country. The value of disarmament, which it is believed will aid in securing universal peace, is of proportionate concern. But the amount of material wealth which this country would save by a reduction of 50 per cent, or even 75 per cent in the cost of its Army and Navy, is small in comparison with the colossal losses which our industrial, agricultural and commercial interests—in fact, the people of every class, from one end of the country to the other—have sustained, and the suffering they have endured, in the past year or eighteen months in the debacle of "deflation". These misfortunes and hardships many of our wisest leaders and best thinkers claim were accentuated—if not brought about by the mismanagement or folly of men in charge of a banking and financial system, which so long as it is ably, intelligently and faithfully administered should ever be a blessing not only to this country, but to the world."

THE FREIGHT RATE QUESTION VIEWED FROM TWO ANGLES.

CHAS. S. FAY, Traffic Manager Southern Pacific Lines.
New Orleans, La., November 30, 1921.

Editor Manufacturers Record:

On the title page of your issue of November 24 is an article on the subject of "Lower Freight Rates and Less Profiteering in Money Essential to Hold Prosperity," in which you are good enough to honor me with the title of Vice-President, whereas I am only a Traffic Manager.

It is true that the Southern Pacific Railroad reduced the rates on hardwood lumber from Memphis to the Pacific coast with a view to meeting the rates via the Panama canal, and many other rates have been reduced for this same purpose. Any railroad would be derelict in its duty to its stockholders did it not meet competition so long as it could earn something more than the out-of-pocket cost for handling the traffic. Of course, it is to the advantage of any railroad to reduce rates in order to handle traffic that it would not otherwise be able to secure, even though such competitive traffic does not pay a rate sufficiently high to contribute to the fixed charges of the carrier.

In addition to those rates that have been reduced to bring about a proper adjustment, and the reductions that have been made to meet competition, the railroads in response to popular demand have likewise recently agreed to reduce the rates on products of the farm, but the writer cannot believe that a general reduction in rates is justifiable so long as the carriers as a whole are not earning anything like five per cent on their valuation.

The article above referred to states that "a few months ago this publication was vigorously antagonized by the writer." I hardly feel that this is a fair statement. An honest difference of opinion, courteously expressed, cannot to my mind be fairly termed "vigorous antagonism."

The article in question closes as follows: "The tide has turned to better business by reason of the better sense displayed in the management of the Federal Reserve System, but its movement can be tremendously hastened by reducing the profiteering in freght rates, just as the profiteering in money should be reduced."

Again it is hardly fair to refer to present railroad rates as profiteering when, as stated above, they are earning the carriers as a whole less than five per cent on investment.

I have no desire to be controversial, but I do desire that the carriers receive justice at the hands of the important journal of which you are so able an editor.

CHAS. S. FAY.

We take pleasure in publishing Mr. Fay's letter, as the MANUFACTURERS RECORD is always anxious to have these great questions discussed freely, pro and con, in order that the public may, through such discussion, learn the real facts.

The real question at issue, from one point of view, is not whether the railroads are earning anything like five per cent, to which Mr. Fay refers, or any given amount, on their valuation or not. We believe that they cannot earn a fair profit so long as business is restricted by the high freight rates which are killing business transactions. As stated elsewhere in this issue, for the first time in more than a century not a single iron furnace in the state of Virginia is in blast, and the cause given by a man whose life has been intimately identified with the iron interests of this country is the impossibility of making iron in Virginia at a profit with the present freight rates. These furnaces, and probably nine-tenths of the industries of the country, are not only not making five per cent on their valuation, but will end this year with a heavy deficit on the year's operations. Broadly speaking, it may be said that the entire agricultural interests of the country, West and South alike, will close the year without a dollar of profit, but with heavy losses, though they are just as much entitled to profit on their investments as railroad security holders are entitled to profit on theirs. There is no reason why, looked at from any standpoint, a railroad investor or an investor in bank stock should be more entitled in these times to profit on the money invested than farmers and manufacturers should be entitled to profit on their investments. All the arguments which can be put up about Government control of railroads, all the arguments which can be advanced as to the necessity for new money for railroad operations in order to extend railroad facilities, cannot change this fundamental situation. It is claimed, and justly, that insurance companies and savings banks have hundreds of millions of dollars invested in railroad securities, and that the safety of the insured and of the depositors must be protected by a fair margin for the roads, but the holders of insurance and the depositors in savings banks and in trust companies are not more worthy of being safeguarded against loss than are the millions of farmers and the other millions of people who are suffering because of lack of employment or for lack of profit in the things they produce, and then, as we have said elsewhere, some railroads have been so unwise this year as to declare large extra dividends in cash and in stock, a blunder so great that every railroad official in the country should protest against it in the interest of all other railroads and of the country itself.

The Southern Pacific Railroad, as stated by Mr. Fay, made a reduction on freight rates to meet the water rates via the Panama canal. That is an unanswerable argument in favor of water transportation. If the country can secure lower freight rates by the development of water transportation,—and this has been so eminently proven in the case of the Panama canal traffic,—then it is the duty of the Federal Government to develop its waterway facilities to the utmost extent possible. The building of the Panama canal has been of enormous value in lowering freight rates. Even greater good would perhaps be done by carrying out the proposed improvement of the St. Lawrence river, which would open up the entire central West to water transportation out to the world and add enormously to the prosperity of the West—and that would mean to the prosperity of the entire world, for everything which adds to the prosperity of one section of the United States inures to the advancement of all.

The improvement of the Tennessee River for all the year round transportation purposes by the completion of the Muscle Shoals dam should be annually worth to the country far more than the total cost of these improvements to the Government.

The MANUFACTURERS RECORD has for years fought for the

adequate development of our railroad system and for freight rates which would be fair and just. It has done this not in the interest of railroads but in the interest of the country as a whole. It unceasingly fought the adverse legislation against railroads. It fought without stint the almost criminal surrender of the sovereignty of this country in the Adamson bill and in other legislation which has taken from the railroad owners the management of their own property and placed in the hands of commissions and boards, most, if not all of which should be wiped out of existence. Nevertheless, we are not at all unaware of the many and costly mistakes and blunders—or crimes some of them might be called—in the financing of railroads, in their management, and in their disregard not only of public rights but of public sentiment. Railroad men have themselves been largely responsible for the hostility which exists against railroads, and they will intensify this hostility if they do not voluntarily and drastically cut freight rates and begin aggressive work for the development of business.

The spirit which the Louisville & Nashville Railroad once displayed when it made a rate of a dollar a ton on export pig iron from Birmingham to Mobile for the purpose of relieving the stagnation in Birmingham iron industry and opening a foreign market for Birmingham pig iron is the spirit which must today prevail in all railroad operations if railroad managers and security holders wish to save the railroad situation from greater disaster than they have yet seen.

PRESIDENT LEE OF THE BROTHERHOOD OF RAILROAD TRAINMEN THINKS THE TRUTH IS NOT IN THE EDITOR OF THE MANUFACTURERS RECORD.

Brotherhood of Railroad Trainmen, General Offices,

Cleveland, Ohio, December 8, 1921.

Editor Manufacturers Record:

My attention has recently been called to an article appearing in the November 17th issue of the MANUFACTURERS RECORD, page 58, under the caption, "Too Late, Mr. Lee," and I am taking the liberty of forwarding to you under separate cover a copy of the December issue of The Railroad Trainman, and would appreciate it if you would read the article appearing in the Journal forwarded to you, commencing on page 753, captioned, "How, When and by Whom the Strike Was Declared Off."

Just such unfair and untrue statements as the one referred to carried in your paper is more responsible for the "Red" element in this country than any other reason that can be shown. The story has evidently been written by one so prejudiced against organized labor that apparently the truth is a stranger to him.

W. G. LEE, President.

The foregoing letter from President Lee of the Brotherhood of Railroad Trainmen seems to justify all that the MANUFACTURERS RECORD has previously said in regard to railroad brotherhood men. Had Mr. Lee regarded the ordinary courtesies of correspondence and failed to charge the editor of the MANUFACTURERS RECORD with a disregard of the truth, his letter might have been entitled to a little more consideration than it now justifies.

Criticisms of the methods of the Brotherhood of Railroad Trainmen in the MANUFACTURERS RECORD and of the radical work of labor unions are not responsible for the "red" element throughout this country; the action of the men themselves awakened this country to its danger from destructive radicalism when they brought about the surrender of the nation's sovereignty under threat of starving the country into submission.

EVERY IRON FURNACE IN VIRGINIA REPORTED IDLE BECAUSE OF HIGH FREIGHTS.

FROM the earliest days of its settlement, long prior to the Revolution, Virginia has been an Ironmaker. Its furnaces and foundries in colonial days were accounted one of its great sources of wealth. Washington's father was a miner of iron ore, shipping it to a furnace near Fredericksburg; and from that time to the present day there has never, we believe, been a single day in the life of Virginia when it was not producing iron. But today, so we are advised, every furnace in Virginia is out of blast. That proud old state, the maker of some of the finest iron ever produced, is no longer at present producing a single ton.

The reason for this, as given in a letter to the MANUFACTURERS RECORD, is exorbitant freight rates,—freight rates which are killing an industry of such value to the state as the iron business has been through its whole history. Mr. James A. Green, President of The Matthew-Addy Company, iron merchants of Cincinnati, in a letter to the MANUFACTURERS RECORD, says:

"I am sending herewith a letter which I am writing to a discouraged iron master in Virginia. This question that confronts the iron masters in Virginia has ceased to be a mere industrial problem; it is now a political problem, because this great iron industry in Virginia lies prostrate on account of adverse, iniquitous and unprecedented freight rates. In the language of the Interstate Commerce law, these rates are neither fair nor reasonable. They are discriminating in the highest possible degree.

"At the present time the entire iron industry of the state of Virginia is wiped off the map—not one furnace in blast—and why should people of Virginia submit to this state of affairs, caused entirely by legislative action; that is, the action of the Interstate Commerce Commission?"

The letter which Mr. Green enclosed is as follows:

"I do not doubt for a moment that Virginia will continue to be a great factor in the merchant iron trade. Many of the conditions that now distress you are general and affect all merchant stocks. One of these is that the steel companies, unable to turn all their iron into steel, have been invading the merchant field. They have been ruinous competitors, making any old price to sell iron. And were it not for this unnatural and unusual competition prices today would be much higher than they are. Another thing is that iron consumption has been about 20 per cent of normal and it is not much better now.

"But Virginia has been particularly affected by a purely artificial condition; you have been isolated by a wall of excessively high freight rates. These freight rates have no justification. They have no relation to anything in real life, so to speak. They were made at the peak of wartime activity, at a time when iron prices were so high and iron was in such demand that anything went. It did't matter tuppence whether freights were two dollars or ten dollars a ton. There was a universal intoxication. The higher the price, the better, seemed to be the motto; no one scrutinized a freight bill. There were large margins for producers and consumers alike, and if the railroads had their share, who cared? But that period of intoxication has passed. We are now back to the usual conditions of industrial competition, back to the time when men again count their pennies. Yet these freight rates remain to perplex and distress trade—and nowhere do they work such a hardship as in Virginia; witness all the stacks in the state down and out.

"But this will not continue; never fear. Virginia will come back; you make the best iron in the world and Virginia cannot be permanently retired."

Surely it would seem that the railroad people must realize that they cannot maintain freight rates which are destructive of business without destroying themselves. Under present conditions the railroad managers are laying up for themselves a store of ill will which will be greater than any that they have had to endure in the past. No possible hope for profit in operation can justify a continuation of the rates now maintained and which are so completely ruining the business interests of the country.

Freight rates must come down.

Thirty-Four American Fertilizer Companies Sign Contract to Turn American Market Over to German Potash Trust and Crush the American Industry.

[Dr. John E. Teeple, President of the New York Section of the American Chemical Society, has made public copies of a new form of contract between the German Potash Trust and thirty-four American fertilizer companies. The terms of the contract are such that the American potash market is virtually turned over to the foreign trust. The contract shows on its face that its purpose is the destruction and ruin of the native American potash industry, the creation of which was urged in the days of our war need by some of the very companies which have now signed a contract to destroy it. Moreover, the contract is immoral if not illegal, because it undertakes to nullify the purpose of the anti-dumping statutes, in antagonism to stated public policy. Some of the companies which have signed the contract are reported to be financing the misleading propaganda which N. W. Ayer & Son, the advertising firm of Philadelphia, has been fathering. The situation, as exposed, is so infamous that Congress cannot refrain from vindicating Americanism by promptly enacting all needful legislation to defeat this contract against the welfare of the United States. Following is a quotation from Dr. Teeple's address—Editor Manufacturers Record.]

By Dr. JOHN E. TEEPLE, President New Yory Section American Chemical Society.

The war is now over, but new commercial wars have arisen that are international in scope and in which the United States is being attacked just as surely as if foreign ships were shelling our coast and foreign armies were being transported to ravage our cities.

Germany's chemical industries have declared war upon the chemical industries of the United States. The German Potash Monopoly has already captured the potash industry of this country. It aims to destroy, root and branch, the potash producers of the United States. It has already received aid and comfort from thirty-four big American concerns. These concerns dominate the potash markets of the United States. If this unholy alliance is tolerated without protest, then no line of industry in the United States is safe from foreign conquest.

I have in my possession a copy of a new form of contract framed with the devil's own ingenuity to evade all existing American laws, including the Anti-Dumping Act and the Sherman Anti-Trust law. This is a contract between the Deutches Kalisyndikat of Berlin, the official German potash monopoly, and the thirty-four American distributors. The provisions of this contract, with the change of a few words, are applicable to almost any industry in the country and if this form of allance is to be successful, then there is nothing to prevent the utter wiping out of one industry after another in this country, and the transfer of industrial supremacy to Germany.

These very American firms that have now combined with the German syndicate to help drive the American potash producers out of business have betrayed an industry that they themselves pleaded to be established in this country. They led in the general demand, voiced in every section of the nation, for the development of new sources of potash supply. Heavy investments were patriotically made to meet this emergency, due to the shutting off of foreign supplies during the World War. The new industry was just getting on its feet. Costs were being reduced, processes perfected, and an independent source of supply guaranteed, at reasonable rates. Within a short period American genius and processes would have been able to meet the competition of the world.

Now, mark what has happened. The Germans, bent on regaining their commercial and industrial supremacy in the chemical industries, decided, at whatever cost, to destroy this formidable American rival. They resorted to the old trick of "cut rates" to drive competition out of the field. They offered prices below cost, and the American potash mixers and distributors swallowed the bait.

The contract provides for the amounts to be purchased by each one of these companies. The price feature effectually prevents any American concern from meeting the German terms, for it provides that if any of the buyers is offered a lower rate than the cut-throat price agreed upon, the Germans are to be advised and given an opportunity to meet it before any outside purchases are made. The German seller also agrees to pay any tax or duty affecting deliveries under the contract which may be imposed or assessed by the United States Government under the Anti-Dumping Act of 1921 or any amendment thereof. The Anti-Dumping Act aims to protect American industries. This absorption of the tax or duty under this act by Germany renders futile the attempt to protect our industries.

The contract also provides that the American potash mixers and distributors shall purchase not less than 75% of their requirements from the German monopoly. In fact, there is nothing to prevent them from buying all of their supply for the Syndicate. It is reported that, by arrangement, the French potash monopoly is to get the other 25% so that nothing whatever is to be bought from any American producer in any event. Further, the fact is that no American producer has been able to sell any quantity of potash to any of these concerns nor to get any orders of consequence.

Therefore, the American potash producing plants have been to all intents and purposes already destroyed and closed down. The Germans have won their first victory in the new commercial war. We are the sufferers. If they can hold their spoils for a year, we are out of the business for ever. Upon that the Germans depend, for then they can raise their price and in one season easily recoup their losses sustained by their present cut-rate contract.

Independent Fertilizer Companies Propose Merger.

To secure maximum economy and efficiency in the operation of fertilizer plants and to enable producers to dispose of their output at smaller costs to farmers through elimination of overhead costs, the merger of 40 independent fertilizer manufacturing concerns from all sections of the country has been planned, with Baltimore as headquarters. Plans for the merger have been progressing quietly since last summer, when a meeting was held in New York and the proposals discussed. Meetings were held later at Baltimore and Savannah, with the result that now approximately 40 concerns operating plants in New England, Middle Atlantic, Southern and Western States are included in the proposed amalgamation.

Baltimore representatives are now at work devising a plan for an organization, and collecting all data pertaining to the plants concerned. Many independent plants have been considering the proposition for some time, and have been impressed with the economical advantage of the amalgamation.

The completion of the organization of this new company as now planned will represent approximately 25 to 50 per cent of the fertilizer output of the country. It is claimed in behalf of the plan that ruinous competition will be eliminated to a large extent, products will be manufactured at the lowest possible cost through economy of operation and reducing overhead and sales costs to a minimum, and efficient distribution will be instituted through centralization of production and shipments in the various sections affected.

Extensive Tests to Determine Commercial Value of Georgia Clays.

To determine the availability of Georgia clays for the making of pottery, refractories, porcelains and other commercial purposes, a series of comprehensive tests, on a scale not heretofore attempted, is being carried on at Columbus, Ohio. The work is being done by the ceramic station of the United States Bureau of Mines, under direction of Dr. R. T. Stull. The investigation has been made possible by the co-operation of the Central of Georgia Railway, which has extensive clay deposits along its lines.

The research work has been in progress for several months and will continue until a year at least has been spent in the tests. While results are as yet incomplete, enough has been accomplished, it is reported, to show great promise and it is expected that new fields for the utilization of southern clays will be developed.

At the Bureau's station in Columbus a small-sized commercial plant has been constructed, involving new features of clay refining. The railway has sent two tons of each sample so that the work does not consist merely of laboratory tests, but is on a scale large enough to duplicate commercial conditions and therefore secure results that are of more practical worth and corresponding value to the industries. The refining process starts with the separation of the material into eight different sizes, by screening, etc. The clays are then passed through a new type of purifier and by wet separation the fine grit is removed. After going through the storage tank and the elutriation tanks the materials are dried in preparation for the tests.

During this stage the microscope is brought into use to determine if the preparatory process has brought out any valuable by-product. It is of course quite possible that while the main body of the clay might be unavailable some highly valuable by-product would appear.

A special furnace costing $3000 has been installed for use in the co-operative work. Under the heat tests all of the samples are reported as having proven highly refractory and showing a fusion temperature ranging from that of the highest grade of fire-clay to that of pure bauxite, which is 3700 degrees Fahrenheit.

The purposes for which it is expected that these clays may be used are pottery, electric porcelain, floor-tile, wall-tile and sanitary ware—a diversified field which holds out possibilities for extensive development. Those clays which are not available for pottery on account of their color have already proved their usefulness as fillers for certain grades of rubber, for paper and for paint. The bauxites and high refractory clays are suitable for furnace work, for electric furnaces, for chemical furnaces and for metallurgical purposes which require high temperatures.

The work is being carried on under direction of the U. S. Bureau of Mines, by two graduate ceramic engineers. These men are in the employ of the Central of Gergia Railway and devote their entire time to the work. In the same building that houses the Bureau at Columbus are the laboratories and lecture rooms of the Ceramic Department of Ohio State University. Students of this department assist in studies of the constitution of clays, microscope work, methods of improving the physical qualities, degree of absorption, etc.

The Ceramic Department of Ohio State University was established in 1894 and offered the first four-year course in this science, which is rapidly developing as industry demands its services. There are now five ceramic schools in the United States.

After these various contributing factors have each had a part in the study of the Georgia clays, and after those most available for pottery have been selected, a thousand pounds or more of each selection will be sent to commercial potteries and will be made up into commercial ware.

By means of these thorough methods and by handling on a commercial scale entirely practical results will be obtained for the guidance of those owning the clays and those who might wish to handle them.

With practically inexhaustible deposits of Georgia clay as a basis and by making it possible to ascertain the exact facts, it is the purpose of the Central of Georgia to make this experimental work of very great value to the section it serves.

Large Plant Nearing Completion—Will Manufacture Refining Carbon.

Marshall, Tex., December 15—[Special.]—The erection of a large plant here for the production of Darco will doubtless be of especial interest to manufacturers of sugar, syrups, maltose, glucose, vegetable oils, chemicals and pharmaceuticals.

The product is a new refining, purifying, deodorizing and decolorizing carbon. Refining carbons play an important part in the production of sugars, syrups, glucose, milk sugar, vegetable oils and fats, lard and butter substitutes, glycerine and many other pharmaceuticals and miscellaneous products.

The Darco Corporation, controlled by the Atlas Powder Co., of Wilmington, Del., is building the plant which is situated on an 85 acre site along the main line of the Texas Pacific Railroad, adjacent to this city. The plant proper will consist of several large buildings of structural steel covered with galvanized iron. The power plant will furnish electricity, air, steam and water for the necessary plant operations. The boilers will be fired with natural gas, with oil as an auxiliary fuel.

In designing the plant particular attention was paid to the efficient handling of materials. From raw material to finished product the materials will be handled by mechanical conveyors of modern type many of them especially designed for the purpose. It is expected that the new plant will be ready for operation early next spring. The output will be of such proportions that manufacturers will be assured of a steady supply of materials to adequately take care of their requirements.

It is said that the new product physically removes all impurities from the materials treated and causes no chemical action or reaction, as commonly occures when chemical bleaches are used.

A new research laboratory has recently been completed at Wilmington, Del., where technical assistance as to the proper use and application of Darco is available. It is now manufactured on a limited scale at Houma, La.

New Hotel for Huntsville.

Huntsville, Ala., December 2—[Special.]—A new hotel is planned here by Mr. Crenshaw who operates the Echols Hotel at Decatur. Plans are being drawn for a sixty-room, four-story structure to be modern and fireproof, and erected on a prominent corner of the business district where a long lease can be secured. Work is reported to start in January.

Tennessee Manufacturers Association to Meet.

Nashville, Tenn., December 10—[Special.]—The ninth annual convention of the Tennessee Manufacturers' Association will be held at the Hermitage Hotel, December 29 and 30. The following program committee has been appointed by President Egerton: B. E. McCarthy, E. W. Foster, T. F. Bonner, J. B. Morgan, Jr., and C. C. Gilbert, secretary of the association.

Marked Activity in Monroe Gas Field — Proven Area Extended.

[Special Correspondence Manufacturers Record.]

Monroe, La., December 16.

Official announcement by the United States Bureau of Mines declaring the Monroe natural gas field to be the greatest field of its kind ever discovered has been followed by marked activity in the gas belt.

Engineers of the Bureau of Mines, in their report, figured the proven area of the gas field at 212 square miles at the time of the survey. The opinion was expressed by the engineers that later development work would enlarge the field.

Following this the Louisiana Department of Conservation announced that, through drilling operations by interests represented by H. D. Walbridge of New York, and H. C. Morris of Dallas, Texas, thirty-eight additional square miles had been added, bringing the total proven area of the gas field to 250 square miles.

Three large interests now have engineering forces in the field, making surveys for pipe lines to connect the gas field with centers of population. These are:

The J. S. Cullinan interests of Houston, Texas, and the Frost-Johnson Lumber Company of Shreveport, La.

Interests represented by H. D. Walbridge of New York and H. C. Morris of Dallis, Texas.

Eastern interests affiliated with the Columbian Carbon Company and the Southern Carbon Company of New York.

The Cullinan and Frost-Johnson interests owned vast tracts of land within the proven gas area. These landholdings were pooled and transferred to the Union Power Company of Shreveport, a Louisiana corporation. The same interests then formed the Arkansas, Louisiana and Texas Development Company and incorporated it under the laws of Delaware for the purpose of constructing, owning and operating pipe lines.

Engineers employed by these interests are now in the field surveying routes for pipe lines to centers of population in Louisiana and adjacent States. Among the cities embraced in their routes are New Orleans, Baton Rouge, Alexandria, and Lake Charles, La., Houston and Beaumont, Texas, Pine Bluff, Hot Springs and Little Rock, Ark., Memphis, Tenn., St. Louis and Kansas City, Mo.

The Walbridge and Morris interests are surveying routes to Baton Rouge and New Orleans, La., Natchez, Vicksburg and Jackson, Miss., and Dallas and Fort Worth, Texas. H. C. Morris is at the head of the natural gas distributing systems at Dallas and Fort Worth, and H. D. Walbridge represents Eastern interests who own those properties. These interests have large land lease-holdings in the gas belt.

Interests affiliated with the Columbian Carbon Company and the Southern Carbon Company of New York, who own and operate carbon black plants in the Monroe gas field, have organized for the purpose of building pipe lines to market gas from their large land holdings in the field. Routes are being surveyed to Ruston, Alexandria, Winnfield, Baton Rouge and New Orleans, La., and Vicksburg, Natchez and Jackson, Miss.

The Louisiana Department of Conservation has refused to issue any more permits for the establishment of carbon black plants in the Monroe gas field, and has announced a policy of curtailing the amount of gas that can be used by the carbon black mills now in operation. This has had the effect of forcing the carbon black interests to find other markets for the use of the gas from their large land holdings within the proven area. Therefore, they decided to go into the pipe line business and have engineers in the field surveying routes.

The carbon black interests, some weeks ago, secured large land holdings in the Terrebonne gas field, in South Louisiana, and announced that they would spend $200,000 in exploiting and development work in that field.

While engineers are surveying pipe line routes the three large interests named are drilling wells in the Monroe gas field. The Cullinan and Frost-Johnson interests are drilling on their holdings in the western portion of the district, the carbon black companies are drilling in the south and southeastern section, and the Walbridge-Morris interests are drilling in the north and northeastern portion. The Walbridge-Morris interests brought in six new wells and drilled four dry holes. It was through this work that the proven area of the gas field was extended in the northeastern portion of the district. The dry holes fixed the boundary of the gas belt in that territory.

Activity of the gas interests appears to have stimulated oil seekers to make another effort to find the oil pool, which supplies gas to the reservoir in the Monroe field. Investigation and tests have disclosed the fact that the gas in the western portion of the field contains a neglible quantity of gasoline, while the gas in the eastern and southeastern portions of the belt is heavily charged with gasoline.

Toward the southeastern portion of the district the gasoline content of the gas increases, and the gas is so heavily charged with it that it yields from 400 to 500 gallons of gasoline to the million cubic feet of gas. This has led some of the oil men to believe that the oil pool is situated in or near the southeastern end of the field.

More than $100,000 has been placed in a syndicate of oil men headed by H. T. Brummett, known as the "wild cat king," Dr. J. A. Phillips, geologist of Oklahoma and the Julian interests of Oklahoma, for the purpose of making a thorough test of the district in the southeastern part of the belt.

Three thousand acres of land have been leased for that purpose. Drilling operations will begin immediately after the holidays. The site selected for the first test well is about six miles northeast of Monroe. Drillers have instructions to go beyond 3000 feet if necessary to completely explore the field. The average depth of the gas wells in the field is around 2300 feet.

With the resumption of activity in the gas field, the Monroe Chamber of Commerce has inaugurated a campaign to induce industries to locate in the Monroe district. S. M. Collins, secretary of the Chamber of Commerce, who is a geologist by profession, is making a survey of the raw materials suitable for manufacturing purposes in the territory adjacent to Monroe. Mr. Collins has already made an inventory of the supply of timber and many of the mineral deposits, such as clays, sand, lignite and limestone.

The Chamber of Commerce has received notice that members of the William Seyler Company of Milwaukee, Wis., representing a syndicate of about seventy-five investors will make a tour of the gas field to investigate conditions with the view of establishing manufacturing plants in this district.

Announcement is made here that the Owens Bottle Company of Ohio has closed a deal for locating a glass factory in the Monroe field for the manufacture of bottles and containers. Citizens of Monroe have agreed to donate a site to the new factory. The Owens Company has contracted with S. S. Hunter of Shreveport, who owns several wells in this district, to furnish natural gas to the factory at 4 cents per thousand cubic feet. The plant will employ about 500 men.

The Ouachita Valley Glass Company, which built a plant at Bastrop the past year, is ready to go into operation as soon as market conditions for glassware improves. The factory is fitted to make various kinds of glass containers. Three hundred men will be employed.

The plant of the Bastrop Pulp and Paper Company, recently completed at a cost of about $1,000,000, has gone into

operation, after a test of the new machinery. R. J. Cullen is general manager of the company which has made contracts that will give it a perpetual supply of old field pine timber. The supply is so large that timber will reproduce itself, through a system of reforestation, as fast as it is cut. The plant employs 300 men.

Governor John M. Parker recently directed the engineer of the oil and gas division of the Louisiana Department of Conservation to make a survey of the natural gas resources of the State, together with estimates and plans for utilization. The Governor's object, as stated by him, is to have the natural gas supply inventoried, probable consumption in the cities and towns estimated and the cost of pipe lines to the centers of population determined.

When completed, the report will be laid before the Legislature and printed for the information of the public. The Governor stated that one of his purposes is to place the State in possession of authentic information concerning its natural resources so that the State government can deal with any situation that may arise. He said he wanted the State's resources utilized by the people and industries of Louisiana, and if private capital did not work out plans of distribution on satisfactory terms, he would recommend to the Legislature that the State construct, own and operate a system of pipe lines.

Contracts Awarded for Hydro-Electric Power Plant Developments Will Reach Total of $8,000,000.

Charlotte, N. C., December 19—[Special.]—Contracts were let last week for the new hydro-electric power plant at Mountain Island, N. C., for the Southern Power Company, which will ultimately involve the expenditure of approximately $8,000,000. Contract was also awarded for the new power house at the Great Falls, S. C., project now under construction.

Work will begin immediately at Mountain Island. Rinehart & Dennis Co., of Charlottesville, Va., were the successful bidders for the Mountain Island plant. The contract includes all concrete masonry, earthen work, necessary excavation, construction of power house and erection of steel work and installation of machinery. The plant will have a maximum generating capacity of 80,000 horse power.

Scott, Stewart, Jones Company of Greenville, S. C. and Rock Hill, S. C., obtained the contract for the power house at the Great Falls development. It will have a generating capacity of 60,000 horse power.

These projects will be completed within the next two years, and during that time large forces of laborers and skilled workmen, technical men and allied crafts, will be engaged in the undertakings. The big increase in the amount of electric power available for manufacturing purposes will strengthen the South and especially the Carolinas as a manufacturing center and will give the Southern Power Co. an important place in the industrial activities.

Stringent Measures Against Export Of Mexican Gold Coin.

Monterey, Mexico, Dec. 12—[Special.]—Warning has been issued by the Department of Finance of the Mexican Government to all banking institutions that in the future any violation of the decree prohibiting the exportation of Mexican gold coin except through regular authorized channels will be punished by forfeiture of their respective concessions and the closing of their doors. It is explained that considerable amounts of Mexican gold coins have been shipped to the United States and other foreign countries on oil tank steamships and merchant vessels in the care of the masters of such vessels, thus evading the customs inspectors. It also is asserted that big amounts of Mexican silver are being surreptitiously shipped out of the country.

Large Tracts of Coal and Ore Lands Purchased Near Gadsden, Ala.—Believed That Extensive Developments Will be Undertaken by Newly Organized Great Southern Steel Co.

The incorporation of the Great Southern Steel Company, at Dover, Del., with a capital of $105,000,000, largely controlled by Chicago interests, is believed to herald the beginning of operations on extensive tracts of coal and ore lands purchased over a period of years in the Gadsden, Ala., section. Those associated with the company are guarding its plans with the utmost secrecy, but it is expected that definite announcements will be made in the near future.

Several weeks ago the MANUFACTURERS RECORD published in its construction columns reports of the purchase of 101,000 acres of ore and coal lands near Gadsden, and this brings the total acreage purchased in that section within the past three years to upwards of 400,000 acres. W. L. Smith, of Gadsden, mineral land dealer, handled a large part of the sales. Charles E. Pain, 38 S. Dearborn St., of Chicago, Ill., is counsel for the company in which John W. Baker, 711 Lumber Exchange Bldg., Chicago and others of that city are interested. Robert W. Hunt, engineer, also of Chicago, is interested in the transfer of the lands and the new company. The Wilmington, Del., incorporators include S. E. Dill, M. A. Bruce and C. H. Blaske.

Relative to the foregoing Robert W. Hunt, of Robert W. Hunt & Co., Chicago, writes: "As yet the Great Southern Steel Company matter is not in such shape that I can give you the information desired. We hope that the enterprise will go forward, but, as already stated, we are not in a position to give you the figures, etc."

To Invite Bids on Vanderbilt University Buildings.

Nashville, Tenn., December 16—[Special.]—Vanderbilt University will soon advertise for bids on the extensive developments planned here with the $3,500,000 received from the Rockefeller Foundation. The main construction will be a large and handsome Medical and Dental Building and a 200-bed hospital. In addition the city of Nashville has raised $75,000 which is a gift to the University and will be added to present funds of their Athletic Association for building a modern Stadium with a capacity of 15,000, with a football and two baseball fields, and a track.

A $250,000 Memorial Hall will also be built, dedicated solely to Vanderbilt boys in the World war. This will be used as a community and recreation hall, and for Y. M. C. A. activities.

Splendid Theatre Building Completed at Greensboro.

Greensboro, N. C., December 10—[Special.]—The National Theatre with a seating capacity of 1800 persons has been completed here by L. B. Flora & Son, contractors, Danville, Va. The building involved an expenditure of approximately $350,000. Heating was installed by W. W. Dick, Greensboro; tile work was done by Austin Smith & Son, Greensboro; and a cooling and ventilating system was installed by the Monsoon Cooling System, Inc., 1476 Broadway, New York.

$300,000 Church Building for San Antonio.

San Antonio, Texas, December 9—[Special.]—August. A. Fuessel has the contract to erect a building for the Sisters of Divine Providence. The new structure will cost approximately $300,000 and will be 100 by 185 feet, of reinforced concrete, brick and stone construction. Plans were prepared by Leo. M. J. Dielmann, architect.

South Atlantic and Gulf Ports Terminal Charges, Etc. —Remedies Suggested.

A report prepared by A. H. Ritter, chief statistician of the Board of Engineers for Rivers and Harbors, War Department, on port terminal charges and practices at South Atlantic and Gulf ports of the United States, has been made public by the Interstate Commerce Commission. It is a voluminous document, covering 46 pages of closely typewritten matter, and it says that the information presented was obtained through the district engineers stationed at Norfolk, Wilmington, Charleston, Savannah, Jacksonville, Montgomery, Mobile, New Orleans, and Galveston. They were directed to inquire and report on facts concerning each port to show the rail owned water terminals, existing tariffs on through business for storage, wharfage and handling, and how these charges are provided for in the through rate; also to describe the overseas business not coming or going on through bills of lading and handled at such terminals, and the corresponding rates for storage, wharfage and handling. Inquiry and report were also directed as to private or municipal independent terminals along the same lines, and furthermore, as to corresponding charges on local overseas business, the length of time all of the charges have been in effect and how they compare with the fair cost of service. Lastly the engineers were told to present their general conclusions as to the feasibility of establishing new terminals under existing tariffs and operating them profitably.

All of these matters the report covers port by port in regular order, beginning with Norfolk, Va., and also including Newport News, Va., Wilmington, N. C., Charleston, S. C., Savannah and Brunswick, Ga.; Fernandina, Jacksonville, Miami, Key West, Charlotte Harbor, Port Tampa and Tampa, Fla.; Mobile, Ala.; Gulfport, Pascagoula, and Biloxi, Miss.; New Orleans, La.; Galveston, Texas City, Port Bolivar, Houston, Freeport Harbor, Port Aransas, Sabine, Port Arthur, Beaumont and Orange, Tex.

The investigations were made during the early part of 1920 when there was great congestion at seaports and while these conditions have been alleviated by the business depression it is noted that there will be periods of freight congestion in the future just as in the past.

The general conclusions show that on account of many conditions and exceptions affecting applications of terminal charges it is difficult to make comparisons between ports, but that the terminal charges at South Atlantic and Gulf ports respectively are about as follows:

	In Cents Per 100 Pounds.	
	Commodity Rates	Articles not Otherwise specified.
South Atlantic Railroad Terminals		
Wharfage	¾ to 1	1
Wharfage and handling	1¼ to 2	2
Storage 30 days (after expiration of free time)	½ to 1	1
Gulf Railroad Terminals		
Wharfage	½ to 1	1
Wharfage and handling	½ to 1	1½ to 2
Storage 30 days (after expiration of free time)	½ to 1	½ to 1
Private and Public Terminals		
Wharfage	¾ to 8	¾ to 5
Loading and unloading	1 to 3	1¾ to 3½
Storage 30 days (after expiration of free time)	3	3

"This shows," says the report, "that the average charges for wharfage and handling at private and public terminals are approximately twice, and charges for storage approximately three times, those in effect at railroad terminals. The railroads receiving the road haul, however, allow the private terminals only the rates which apply at their own terminals, and as these rates are not profitable, the private terminals do not seek through business, but confine their attention largely to local freight.

"Present actual cost of terminal services.—The present fair cost of the several terminal services is approximately as follows:

Wharfage, 1 to 3 cents per 100 pounds.
Loading or unloading cars, 2 to 5 cents per 100 pounds, according to commodity.
Storage, 2 to 3 cents per 100 pounds per month.

"On the above basis the charge for wharfage and handling should generally not be less than 3 cents per hundred pounds, except possibly in the case of certain low grade freight which cannot stand this charge. On high grade package freight a charge of 4 to 5 cents a hundred pounds would not be unreasonable."

Under the head of "How Insufficient Terminal Rates Injuriously Affect Transportation" the report says.

"The practice which railroads have followed of buying business with their terminals has been instrumental in causing serious congestion at our seaports, because it rendered financially impossible the construction of new terminals or the modernization of older wharves. * * * Among other deficiencies there is a great shortage of storage facilities, and this shortage has resulted in the use of cars for storage which should have been used for transportation. Because of the inadequate terminal facilities vessels are unable to obtain their cargoes promptly and their stay in port is thereby greatly increased. Unlike cars, which obtain some revenue from demurrage, vessels held in port are accumulating heavy charges from which there are no returns."

In support of this statement and to show the advantages of rapid sailing through quick unloading and loading, the report presents figures concerning a steamship at New York for 15 days in August 1918. This vessel was of 6450 dead weight tons and the average daily expense in port was $2,066.26 so that if the ship had been in port only 6 days, instead of fifteen days there would have been a saving of $18,596.34. These figures included war risk and cargo insurance, so now the daily expense would be about $1850 to which should be added profit lost by the stay in port which is about $1000 a day at present, making $2,850 daily.

"More serious than these changes, however," says the report, "are the heavy losses sustained because of inability of shippers to meet contracts for delivery and the losses due to changes in market prices occurring while freight is tied up at the terminals. * * * Such losses have been so heavy as to discourage production and in many lines have been the cause of an increase in price to cover the unknown hazards of transportation."

"To permit the free flow of commerce through our ports," says the report in its concluding paragraphs, " the obstacles in the way of creating modern terminals must be removed, and since the carriers themselves cannot be expected to initiate the necessary reforms, prompt steps should be taken by the United States. Two remedies have been suggested: First, a scale of terminal charges sufficient to cover the actual cost of the service, plus a reasonable return on the investment. This would enable private terminals to operate if the railroads were obliged to pay them such charges for services actually performed. Second, the discontinuance of the practice of absorbing terminal charges in the rate for the haul. The latter remedy has been widely advocated, but clearly presents some difficulties in its application and necessarily implies a complete revision of all rates to and from water points."

The advantages of municipally owned and operated belt lines and water terminals are also mentioned but it is remarked that they are not practicable in many places.

Martin Carroll, 3117 Flora Street, Kansas City, Mo., has been awarded the contract for erection of a church structure there for the Rev. F. X. McCabe, at a cost of $175,000.

Chesapeake and Potomac Telephone Company at Work on $8,000,000 Development Program.

Upwards of $8,000,000 is involved in the fulfillment of the extension and improvement program of the Chesapeake and Potomac Telephone Company of Baltimore in work completed during the the past year and that shortly to be undertaken. According to an announcement just made by G. H. Warren, division manager, approximately $5,000,000 has been expended in the extension and improvement of the telephone system in Maryland. During 1922 plans as now completed call for the expenditure of an additional $3,000,000.

In the city of Baltimore a number of the undertakings that are now under way or have been completed are the following: New Liberty Building Exchange and central office equipment, more than $1,000,000; additions to St. Paul and Calvert central offices, $200,000; additions to Madison central office, $130,000; new operator's training school equipment, $67,000; central office equipment for Hamilton, $60,000; conduits and cables to extend outside plant, $300,000; and audible ringing equipment, $36,000. During the current year ending December 1, there have been installed in the city 14,300 new telephones, giving a net increase after reductions for those disconnected of 4,764.

Throughout the state many improvements have been made at great cost. For improving the service on rural lines more than 400 miles of circuits have been built.

Resort Hotel to be Erected.

Bowling Green, Ky., December 16—[Special.]—Col. H. L. Underwood is planning the erection of a modern hotel at his resort, Lost River Cave, five miles from town, with the double purpose of attracting tourist and commercial trade. Present facilities are insufficient since the oil activity, of which Bowling Green is headquarters—everybody seems to want to stop here at night. Mr. Underwood already has a fourteen-room tavern at his beautiful scenic point, which is on—rather directly under—the Dixie Highway, the main line to Florida. He will seek to interest bigger capital before going ahead, with the idea of a large resort hotel, golf links, hunting club, etc, to combine with remarkable natural attractions. The cold air from the cave underneath is always at 55 degrees, and will be piped to every room.

Smaller Tobacco Crop at Better Prices.

Franklin, Ky., December 8—[Special.]—Tobacco is bringing excellent prices here and is doing much for the country in offsetting low prices on other farm products. This year's crop is around 6,000,000 pounds and is being sold at from five cents to thirty-six cents per pound. This means that from $750,000 to $1,000,000 will be turned loose in this section with the close of the season in sixty days time. The crop is smaller than last year, but of better grade.

$1,000,000 Masonic Temple Contract Awarded.

Oklahoma City, Okla., December 17—[Special.]—Contract for the erection of a $1,000,000 Masonic temple building has been awarded Campbell & Price. Ample room for accommodating practically all of the lodges in the city will be provided. There will be a main auditorium with a seating capacity of 1000 persons, and another with a capacity of 700. A roof garden, dancing floor, dining room and other accommodations will be features of the new structure.

Planning $250,000 Masonic Temple.

Greensboro, N. C., December 17—[Special.]—Plans are being discussed here for the erection of a $250,000 Masonic temple. Charlts C. Hartman, of this city, is the architect, B. MacKenzie is chairman of the building committee.

Mennonites Arrive from Canada.

Yellow Pine, Ala., December 17—[Special.]—A thousand Mennonites, occupying 18 cars, have arrived here from Regina, Sask., after having become dissatisfied with conditions in Canada. They brought with them cows, horses, sheep, household effects, vehicles and farming implements. Investigators who preceded them selected this village and the vast tracts of "cut-over" lands surrounding it. They will at once begin the preparation of the soil for next year's crops. The soil is rather richer than in ordinary "cut-over" tracts, and vast stretches of unimproved acreage afford the Mennonites ample opportunity to gratify their desire to participate in agricultural pursuits.

Three New Refineries Will Begin Operations.

Bowling Green, Ky., Dec. 16—[Special.]—This section is reflecting the improved oil market by great activity in both the deep and shallow fields. New wells are being drilled daily. In the shallow field, paying production is obtained at from 350 to 500 feet, and at 1100 feet in the deep field. Three loading racks now handle the flow of the increased pipe lines, estimated at a thousand barrels daily.

The three refineries now building will be in operation about January 1, with capacities of from 200 to 500 barrels each. The by-products of these will be used by another new plant for manufacturing commercal greases and lubricating oils.

Development of Uvalde, Texas, Resources.

San Antonio, Texas, December 10—[Special.]—In the vicinity of Uvalde, Texas, on the Southern Pacific, a railroad has recently been completed into the cedar lands, the estimated value of one tract alone being $5,000,000, according to D. D. Denton, of this city. In addition plans are being pushed for building a railroad to the kaolin beds for their development. Trap rock is now being mined. Coal is being produced at three points, and this compares very favorably in quality, it is said, with the coals of Illinois, Iowa, Michigan and Missouri.

529 Producing Oil Wells in Mexico.

Monterey, Mexico, Dec. 16—[Special.]—In an official statement just issued by the Department of Industry, Commerce and Labor of the Mexican Government, giving a review of the oil industry in this country, it is declared that there were a total of 529 producing wells on December 1 of this year. The total available daily production of these wells was 966,062 cubic meters, equivalent to 6,076,530 barrels. Of this production only seven and one-half per cent remained in Mexico.

School Building Contracts Awarded.

Wilson, N. C., December 5—[Special.]—Contracts for erecting and equipping the new school building in West Wilson have been awarded as follows:—general contract to W. P. Rose, of Goldsboro, for $180,202; heating and plumbing to J. L. Powers, of Bennettsville, S. C., for $25,463; electric equipment, Peoples Electric Co., for $5,327; total $210,992. The money for the work is provided by the recent bond issue. Other work will get under way in the section in the near future.

Big Plant at Chattanooga to Manufacture Bath Tubs.

Chattanooga, Tenn., December 15.—[Special.]—Manufacture of bathtubs and other large fixtures will be undertaken here by the Crane Enamelware Co., according to plans of stockholders of the Mutual Enamelware Co. in which the Crane Co. has been interested for some time. The company will be capitalized at $2,000,000. The large new plant of the Mutual is located at Alton Park, and is modern in every respect. Several additional units may be built.

NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore we often publish letters with which we do not agree.—Editor Manufacturers Record.]

How a "Plain Massachuseets Yankee" Regards Some Railroad Deals and Freight Rates.

A. L. HILLS, Atlanta, Ga.

I have "howled" in the columns of the Atlanta Constitution and Philadelphia Ledger and I don't know as it does much good to tell people of the sins of our financiers and the Interstate Commerce Commission.

I am just a plain Massachusetts Yankee now living in Georgia, and unfortunately have to buy coal and don't like to pay the price.

For years I was in the service of the New York Central Lines in the passenger department, and sold stocks and bonds a long time, and know the railroad game in all its ramifications, financially and in a workingman's position as well.

The coal man put it up to the railroads as one big reason, the I. C. C. is so busy, they cannot let Henry Ford reduce rates until next summer when we won't need any coal. The Louisville & Nashville brings lots of coal to Atlanta. They recently discovered they had an $82,000,000 "surplus," notwithstanding they have bonds and short notes and various stylish liabilities of upwards of $200,000,000 and an annual interest account of over $6,000,000. Mr. Morgan, or somebody, told 'em it would be wise to increase their capital account so they could be in a position to borrow more money. This would give the bankers more commissions and the new stock would give the seven per cent dividends and the new bonds they are selling would have interest payments to meet, and the great I. C. C. permitted them to "distribute" some $50,000,000 of this alleged surplus, which probably was spent long ago, like Bro. McAdoo's Liberty Bond payments. Nothing was said about reducing their debts and overhead charges; there would be no commissions in that; and nothing was said about reducing their high coal rates and the poor devils are still paying the price and skinning along and taking chances with pneumonia and doctors' bills. As a helper to high rates and commissions to bankers and dilatory action on rates the I. C. C. is a success.

I am a Republican of the fairly rabid sort and never did see much good in Democratic doctrines, and so no one can say I'm disgruntled for political reasons. I am simply disgusted with the I. C. C. permitting the railroads to throw away their alleged surpluses and take it out of our pockets through the high coal rates. I dared Brother Stone of the Brotherhood of Locomotive Engineers to get out an injunction, but he said the people had been standing for this sort of thing ever since he had been in the game and let 'em have it. If I had a $25,000 salary I would give some of it to the courts in this matter.

New England burns anthracite and the D. L. & W. is the road of spotless anthracite, and the I. C. C. allowed them to give up a 100 per cent dividend and coal selling sky high. They haven't cut their coal rates, or if they have I haven't heard of it.

And now another big coal carrier, the Chicago, Burlington & Quincy, I understand, will hand over a twenty per cent dividend to the owners thereof and the I. C. C. defers even consideration of application for reduction of coal rate until January 31.

A south Georgia farmer sent some stock to North Carolina; after the freight rates were paid there was little left; they say cattle sent from Georgia to New York might possibly sell for enough to pay the freight charges. Ice cannot be shipped from Pocono to Philadelphia and compete with the artificial product; the freight melts it all. Brick made in New Haven cannot go to Philadelphia because the freight is the whole thing, and so it goes and goes, and don't go.

And SERVICE: That's something else again. A barrel from Chicago to near Atlanta came through in FOUR WEEKS; a few pieces of household goods came 125 miles in ten days; a jag of furniture came 100 miles in four weeks, and a box from Gardner, Mass., via Savannah Line made it in six weeks and the freight crews stopping in the woods for wild flowers made their "over time" come O. K., and may strike "FOR THEIR RIGHTS."

I am not talking from hearsay. I am struggling to pay last winter's doctors bills on account of pneumonia of my two children caused because I could not afford five dollar coal at $12 in sufficient quantity to keep comfortable. I suggested to Vice-President Coolidge that some of his esteemed Senators take a trip to New York and a short course as a conductor on a trolley car might give them some points on the speed subject. I did it for four weeks once upon a time.

I was brought up in New England, where some honest men live. It's no wonder we have the Ku Klux Klan and the ONLY reason they don't shoot coal operators, politicians, commissioners, or somebody is that the field is so large they are rattled and don't know where to begin.

Seeking Information from Potash Firms.

J. D. PACE, Acme Oil & Drill Co., Inc., Shreveport, La.

As you know, I am receiving your journal every week, and as I find so many solid facts in the MANUFACTURERS RECORD it has become such an important book of news to me that I await its arrival with great expectancy. Never disappointed.

The writer has been in the oil business for 18 years. My anxiety to know always the formation being passed through while putting down a well has caused me to perfect a core bit that will enable me to know the exact formation being drilled. This and the several articles on America's potash resources and concerning N. W. Ayer & Son is the reason I am writing you this letter.

We have a bed of potash that is over a hundred feet through and may cover several hundred acres. How can this potash be brought to the surface where it is over 1000 feet deep? Please have such concerns write me as will be for the best interests of the potash business.

Wants Bonds Made Legal Tender.

BOYDEN NIMS, Chemist, Columbus, S. C.

I have just read an editorial of yours reprinted in today's Columbia State. You seem to be the only influential organ making a special fight against the present deflation policy of the government. There is a tremendous amount of money tied up in Liberty Bonds and other obligations of the government. Why could this not be put to work by congress declaring them a legal tender for all financial obligations, public and private with interest to cease at time they become a legal tender? There is nothing back of them but the promise of the government and this promise would be as good back of a non-interest bearing legal tender as back of an interest bearing bond. As you say, the present policy has placed us between confiscation and repudiation, and that at no distant day. I would like to see an editorial discussion of this proposition in the MANUFACTURERS RECORD.

THE IRON AND STEEL SITUATION

Market Conditions at Pittsburgh.

Pittsburgh, Pa., December 17—[Special.]—Steel ingot production is now at a rate of about 21,000,000 gross tons a year, as nearly as can be estimated. This compares with a recent maximum of about 25,000,000 tons, early in November, and a rate of about 10,000,000 tons at the low point last July. In 1910 production was 25,000,000 tons and consumers of steel were quite busy. The railroads were laying new track and freight cars and locomotives were being built in large numbers. The steel industry was fully employed. Now, however, the capacity is twice as great, so that consumers can be quite active while there is much idle productive capacity.

The decrease in the rate of steel production in the past few weeks has been chiefly on the part of the independents, the Steel Corporation's operations having declined only a trifle. At nearly all times in the past year the Steel Corporation has operated at a better proportionate rate than the independents. This has been due chiefly to the increased good will the corporation acquired last year by holding down its prices while all the independents made large advances. It is due in no part to recent selling prices, since as a matter of fact, since last February the Steel Corporation has on an average secured slightly higher prices than the independents.

The divergence between Steel Corporation and independents prices is illustrated by recent developments in the tubular goods market. September 16 the National Tube Company (Steel Corporation) issued reduced price lists, as a result of independent shading. Shortly after the new lists appeared fresh shading developed, and this shading spread steadily until last Thursday the National Tube Company had to take cognizance of it, by reducing its prices again. New cards dated December 15 increase discounts on standard steel pipe and O. D. pipe by 2 1-2 points or about $5 a net ton, and discounts on line pipe by three points or about $6 a ton. Oil country goods are reduced about $5 a ton. The reduction on standard pipe is greater than the average of the shading, which was usually done by giving an extra 5 per cent discount.

An interesting point about the reduction in tubular goods is that it tests the general rule of steel prices being practically stationary in the past few weeks because demand was light and was confined to small lots. The demand for tubular goods has been heavy, not light, and prices yielded. Slight further declines in some other products are expected when demand broadens after the opening of the new year.

Bars, shapes and plates generally remain quotable at a range of $1.50 to $1.60, but the lower figure is more frequently in evidence than formerly. Hoops, strips and bands are almost nominal at $2.00. Plain wire is quotable at $2.50 and nails at $2.75, the prices ruling before the advance of September 12, which has lately been lost. Sheets, formerly very irregular, are now the firmest item in the whole finished steel list, at $3.00 for black and $4.00 for galvanized.

The Pittsburgh basing or "Pittsburgh plus" system of quoting delivered prices on steel products is still less in evidence than a few months ago. The east, south and west are making their own individual markets on most products, which can be bought delivered at less than the market price in Pittsburgh plus the rail freight from Pittsburgh to point of delivery. When Pittsburgh and valley mills meet the delivered prices made by mills far removed from Pittsburgh, as they sometimes do, they realize less f.o.b. their mills than when selling in nearby territory.

Foundry pig iron, quotable nominally for several weeks at $20.50, valley, has sold in a few small lots at $19.50, thus making a real market at this figure. Bessemer remains quotable at $20 and basic at $19, both at valley furnaces, freight to Pittsburgh being $1.96.

Connellsville coke continues very weak, $3.00 being merely an asking price. Spot foundry is $3.75 to $4.75, depending on brand, sales at above $4.00 being rare.

Some mills will probably close for Christmas week or the first week or two of January and thus steel production is likely to decline farther for a short time. Fundamental conditions being at least as good as in October and November, the rate of steel ingot production is likely to react up to a rate of 23,000,000 or 25,000,000 tons by February 1.

Birmingham Expresses Confidence for Future.

Birmingham, Ala., December 19—[Special.]—The year will go out with the pig iron market in this section rather weak, though furnace interests are expressing confidence that recovery will be noted before long. A few sales have been made for delivery during the first three months of the coming year and in the few days remaining before the actual holiday season sets in it is believed that deals will be consummated that will provide for quite an amount of iron to be delivered in 1922. The quotations are around $17.50 to $18 per ton, No. 2 foundry, for immediate delivery. On iron for delivery in the future there is inclination not to accept this low a price, the claim being that the margin of profit is too close. Two or three companies in this district announce that they have considerable iron sold for delivery during the first three months of the new year and in one instance there will be warrant for starting up a blast furnace. The blast furnace output of iron of all classes, basic, foundry and charcoal, is now around 110,000 tons a month.

Furnace interests manifesting a little more optimism than others express the belief that there will be a steady recovery during the coming year, that not only will the domestic market show signs of improvement but the foreign business will pick up. Many reports are being received here as to possibilities the coming year. Financial recovery in Cuba will bring about considerable business for the foundries and machine shops manufacturing sugar refining machinery. Sale of bonds in Argentina will bring about big business in high pressure cast iron pipe, many towns and cities in that country to be given water and sewerage development by the government. Both countries will look to the Birmingham district for the product.

The coal business is showing some signs of improving. The second shipment of 2000 tons is now being made on the Galveston harbor bunker coal project, 4000 tons a month at least to be shipped from this district via the Warrior river to Mobile and thence by sea-going tugs to Galveston, the tugs bringing back sulphur from the Galveston section. The coal business in this proposition is being handled by the DeBardeleben Coal Company. Railroads expect to need more coal in 1922 than for the past two years.

The coke market is rather quiet and with the exception of the pitch coke, being produced by the Barrett Company in the bee-hive coke ovens of the Republic Iron & Steel Company, selling at from $8 to $8.50 per ton, there is little strength shown in prices, foundry coke being down to $5.25 to $5.50 per ton and furnace coke around $5. Manufacturers of coke who formerly had some Mexican business complain bitterly still as to freight rates to that country, both rail and water, and show that coke from the Connellsville, Pa. district is being shipped via Philadelphia and Baltimore into Mexico under what can be done from the Birmingham district, which is less than half the distance.

By-product coke oven production is fairly good, every plant in the state operating, in many instances more than three-fourths full. The Tennessee Company has four and the Woodward Iron Company has three blast furnaces to furnish besides foundries and machine shops, the Sloss-Sheffield Company is furnishing gas to the city of Birmingham, the Central Company has a furnace to supply, the Alabama By-Product Company is shipping coke into Mexico and is selling on the open market and the Semet-Solvay is making coke for The Alabama Company.

Quotations for pig iron and iron and steel scrap in the Birmingham district are as follows:

PIG IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, $17.50 to $18.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, $18.00 to $18.50; iron of 2.75 to 3.25 per cent silicon, $18.50 to $19.00; iron of 3.25 to 3.75 per cent silicon, $19.00 to $19.50; iron of 3.75 to 4.25 per cent silicon, $19.50 to $20.00; charcoal iron, f. o. b. furnaces, $35.00.

OLD MATERIAL.

Old steel axles	$15.00 to $16.00
Old iron axles	19.00 to 20.00
Old steel rails	13.00 to 14.00
Heavy melting steel	11.50 to 12.50
No. 1 R. R. wrought	12.00 to 13.00
No. 1 cast	16.50 to 17.50
Stove plate	13.00 to 14.00
Old car wheels	13.00 to 14.00
Old tramcar wheels	12.50 to 13.00
Machine shop trimmings	4.00 to 5.00
Cast iron borings	4.00 to 5.00

Increasing Volume of River Traffic.

Indicative of the steadily increasing volume of traffic on the Mississippi River and its tributaries is the statement to the MANUFACTURERS RECORD of A. R. Kennedy, traffic manager of the Pittsburgh Steel Co., Pittsburgh, Pa., as follows:—"A second tow of barges loaded with steel products and coal approximating about 14 steel barges, 12 of which were iron and steel products, left Pittsburgh, December 6, in tow of the steamer Transporter, owned by the Water Transport Co. This company had two barges of steel products from Memphis in this tow, approximating 1500 net tons."

There is talk of using barges that will be seaworthy in some of the river traffic so that they may be towed across the Gulf of Mexico to Mexico and South American ports. There has been a decided increase in the business of other shipping firms along the river. Thousands of dollars in freight costs are saved and products are available to the public at lower prices than by rail transport.

The demand for river passenger steamers is also increasing, and the Mississippi & Ohio Packet Co. will put a new vessel in operation shortly.

Gasoline Railway Plan at Fayetteville, N. C.

The recent organization of the Cape Fear Railways, Incorporated, at Fayetteville, N. C., calls for the immediate construction of a standard gauge railway to connect the old street railway there with Camp Bragg, and also for an extension southward from Fayetteville to the cotton mill villages in that direction. The total track will be approximately 20 miles long. L. H. Couch, of Raleigh, N. C., vice president and general manager, says that construction of the extensions will be started as soon as contracts can be let, and the purchase of gasoline propelled trains will be made in the near future.

The home office of the company will be at Fayetteville. N. A. Sinclair, of that city is president, and A. G. Bradley of Raleigh, secretary and treasurer. The board of directors also includes John R. Tolar, Frank H. Stedman and A. B. McMillan, of Fayetteville, and J. Kemp Johnson, of Raleigh.

This company supersedes the old Cumberland Railway & Power Co.

RAILROADS

Agricultural Department Established.

The Alabama, Tennessee & Northern Railroad Corporation, operating 186 miles of line from Calvert to York and Reform, Ala., has established an agricultural department to encourage farming along its route and also to enable the farmers to profitably and promptly market their products. President John T. Cochrane, of Mobile, is reported as stating in connection with the announcement of this new step, that there are thousands of acres of the best farm lands along the road but that the farmers lack a sure market for diversified products. Capable men will be in charge of the department to put into effect modern methods of marketing farm crops by getting buyers and sellers together so that as soon as crops are gathered there may be immediate sale for them. Stock raising will also be developed and similar steps will be taken to get cattle, hogs and sheep to market. J. F. Gavin, traffic manager of the railroad, who will have direct supervision of the new department, has appointed H. H. Bolton to be agricultural agent, and he will begin a campaign immediately among the farmers to bring about greater and more successful agricultural development. Offices are at 68 St. Francis St., Mobile, Ala.

Jackson to Union, Miss.

A movement is in progress at Jackson, Miss., engineered by the Jackson Chamber of Commerce, to raise a subscription fund of $93,000, to secure the extension there of the Jackson & Eastern Railroad, now under construction, and of which S. A. Neville, of Meridian, Miss., is president. A statement from President Neville says that 14 miles of the line are now being operated from Union to Sebastopol, Miss., and that five miles more of line are about completed westward from Sebastopol towards Jackson. Right of way has been practically all obtained for the remainder of the way to Jackson and it is proposed to finish the entire line by January 1, 1923, but to accomplish that object it is desirable to start work also out of Jackson and push thence eastward to meet the line that is being extended from Sebastopol. There are $140,000 of bonds authorized, that are a first lien on the line already constructed and will be similarly so on the line that is to be built. The subscription campaign is to buy $93,000 of the bonds, the railroad company agreeing to build 11 miles of line eastward from a point near Jackson by September 1 next and also to build a mile of line from the other end for every mile constructed from the Jackson end, but the rest to be done by the end of the year. Entrance to Jackson is to be obtained over the Alabama & Vicksburg Railway and the New Orleans Great Northern Railroad. About one half of the fund has been subscribed.

Merger of Electric Railways.

Grafton, W. Va., December 17—[Special.]—Local traction lines having been reorganized under the title of the Tygarts Valley Traction Company, E. W. Alexander has been appointed as general manager and has taken over their management. The system was greatly run down at the time of its sale and it has been necessary for the new company to move slowly in rehabilitating it. The new general manager has been managing street railways for the last 17 years. He was manager for a number of years of the Kanawha Valley Traction Company and had general charge of the building of the Dunbar Traction Company's line at Charleston, W. Va., in 1911. Many improvements are being planned by the new management.

An "Articulated" Railroad Train.

A unique railroad train, termed "articulated," is being operated on the Great Northern Railway of England between London and Leeds (about 200 miles), according to the Railway Gazette of London. The train is really one long car, divided into sections which correspond to separate vehicles and hinged so that it can take curves, but with a minimum of wheels and a practical elimination of couplings. There are six trucks, each of which has four wheels, and one of them is at the forward end of the train, four of them are distributed one at each of the points where sections meet, and the last at the rear end of the train. Once put together the train is maintained so and connections between the cars or sections are made permanent and weather proof. Thus each truck does duty for two cars, or sections, excepting those trucks at either end of the train. A train of this size is sufficient for regular service, but if more cars should be required on special occasions they can be added.

It is claimed that this kind of train provides easy riding, avoids oscillation of the cars (which owing to generally lighter construction of railway rolling stock is more experienced in England than in the United States), and also eliminates noise from ordinary couplings. The train has three cars for passengers, one dining car and one kitchen car and they are so arranged that the dining car will be in the middle of the train. It is observed that the Great Northern Railway has heretofore operated an "articulated" train, but it is said that this one is a great improvement upon the former type.

Southern Pacific Extension In Mexico.

Guadalajara, Mexico., Dec. 14—[Special.]—The extension of the Southern Pacific Railroad in Mexico to Tepic, will be in operation to that city within a few weeks, opening a big expanse of coastal country to agricultural development. It is stated that many American farmers have already gone into the region. The line now ends at Pujo, only twelve miles from Tepic.

According to official announcement the construction forces of the company will resume the construction of a line between Orendain, 25 miles west of Guadalajara, and Tepic as soon as the work now under way is finished. Work was suspended several years ago on account of the revolutionary disturbances. There is much heavy construction to be done and it will require several years to complete it.

The new state of Nayarit, of which Tepic in the capital, is said to be the richest in undeveloped agricultural resources in all Mexico. Already much attention is being given to growing sugar cane, bananas, citrus fruits and a variety of tropical products.

Trackless Trolleys For Norfolk and Richmond.

A company is being formed at Norfolk, Va., to operate there a trollibus or trackless trolley line, the movement being headed, temporarily at least, it is stated, by T. S. Wheelwright, president of the Virginia Railway & Power Co., which operates the street railways there. The route to be followed by the new vehicles is over twelve streets and avenues. A franchise was prepared by the company in consultation with the City Council. The capital of the company will be $150,000, including $75,000 of preferred stock. Mr. Wheelwright and associates are taking similar action to operate a trackless trolley line in Richmond, Va.

Railroad Wages Cut; Lower Rates to Come.

A report from Dallas, Tex., says that an official notice has been posted by the Texas & Pacific Railway stating that the wages of all of its employes will be reduced 10 per cent. J. L. Lancaster, receiver of the property, is quoted as saying that lower freight rates will be established.

Texas Railroads Display Large Gains.

Austin, Texas, Dec. 17—[Special.]—If the revenues of the railroads of Texas may be taken as an indication of the business condition of the State there was a big improvement during the first nine months of the year over the corresponding period of 1920. According to figures just compiled by the State Railroad Commission the net revenue from operation of all the railroads of Texas for the period ending September 30, 1921, was $27,699,158, an increase of $31,872,498 over the same nine months of 1920, when there was a deficit of $4,173,340 for the period.

For the nine months of 1921, the operating revenue was $164,957,118, an increase of $3,200,114 or 1.98 per cent. The operating expenses were $137,257,960, a decrease of $27,672,384 or 17.28 per cent.

The ratio of operating expenses to operating revenue was 83.21 per cent as against 102.58 per cent for the preceding period.

It is noticed that the higher freight revenue produced a large part of the increase, but that the advanced passenger fares caused a material reduction of income from that source.

Receivership Sale for an Arkansas Line.

The sale of the Memphis, Dallas & Gulf Railroad will not take place until March 26 next, according to a report from Texarkana, Ark.-Tex., which says that the sale will be conducted there under an order of the Federal Court at Fort Smith, signed Dec. 13. Martin Walsh, of Nashville, Ark., is receiver.

The main line of the road runs from Hot Springs southwest to Murfreesboro, Nashville and Ashdown, Ark., 113 miles, but the company also has a detached piece of railroad running from Daleville, on the Missouri Pacific Railway near Arkadelphia, to Dalark, 12 miles. The officers are: Jos. Dickson, Jr., Prest., St. Louis, Mo.; Martin Walsh, V. P. & Gen. Mgr.; C. C. Henderson, Vice-Prest., El Paso, Tex.; J. G. Sain, Gen. Atty., Nashville, Ark.

This line was incorporated in June 1906 as the Memphis, Paris & Gulf Railroad but the name was changed to its present form in 1910. Two or three small lines were acquired and made part of the main line. It is a standard gauge road laid with 56 and 60 pound rails and has 10 locomotives and 143 cars. The receivership was created in September 1920. The bonded debt amounts to $2,052,000.

Ten Hour Work Day for Section Hands.

The United States Railroad Labor Board, in its announcement of new rules last week, provides that extra pay per hour for overtme in the case of railroad maintenance of way employes will not begin until after the expiration of 10 hours. The principle of the eight hour day is recognized, however, the rule specifying only that time and a half for overtime is not to begin until after ten hours.

This rule therefore makes a ten hour day at usual rates per hour possible for the railroads. It is observed that practically all section gangs have to work regularly more than eight hours, owing to the time required for them to reach the points of actual labor on the lines. It is also noted that seasonal conditions often require more than eight hours a day work for such men. Moreover, regular work on Sunday or any other holiday now only commands regular rates of pay. It is said that the new rules will save large sums for the roads. They took effect Dec. 16.

No Bidders for This Railroad.

Reports from Chattanooga, Tenn., state that the effort to sell the Tennessee, Alabama & Georgia Railroad failed for the fourth time on Dec. 15, there being no bidders, and the sale was adjourned until January 7.

GOOD ROADS AND STREETS

Contracts Awarded for New Road Construction Costing $1,500,000.

Raleigh, N. C., Dec. 17—[Special.]—Bids were received here recently on 13 projects scattered throughout the state, and involving the expenditure of approximately $1,500,000. A total of 115 bids was received with the following result: Project No. 113 in Chowan county from Edenton north towards Gatesville, 9.89 miles of grading, to N. L. Teer, Durham, at $13,645; contract for bridges to P. R. Ashby, Raleigh, at $23,409. Project No. 114 from the end of Project No. 113 to Gates county line to Battershill & Goode, Virgilina, Va., at $15,767 for the roadway, and to Chandler & Ragland of Virgilina, at $25,200 for structures.

Project No. 115 in Martin and Pitt counties 19.31 miles of grading and surfacing to J. P. Divus of Burgaw, N. C., at $58,784, and to P. R. Ashby, Raleigh, at $30,467, for structures. Project No. 291 in Wilson county to P. R. Ashby at $184,993. Project No. 695 in Union county to Redmon Construction Co., Munroe, at $112,604. Project No. 811 in Burke county to the Southern Dray Co., Ashville, at $168,302, and for bridges to the same company at $3890. Project No. 823 in Cleveland county to Southern Paving Co., Chattanooga, Tenn., at $54,814, and to Z. B. Weathers & Son, Shelby, N. C., at $19,035 for bridges.

Project No. 856 in Mitchell county to Porter & Boyd, Charlotte, N. C., at $199,132, and to L. J. Chandler of Virgilina, at $18,146 for structures. Project No. 833 in Henderson county to Sam Davis Construction Co., Greensboro, N. C., at $26,312, and to Asheville Construction Co., at $8607 for structures. Project No. 879 bridge for Mountain Creek to Austin Bros. Bridge Co., Atlanta, Ga., at $5215. Project No. 920 in Clay county to E. A. Wilson Co., Knoxville, Tenn., at $33,838, and to W. T. Moore Concrete Products Co., Andrews, N. C., at $16,048 for structures. Project No. 980 in Macin-Swain counties to E. A. Wilson Co., Knoxville, at $28,407, and to Southern Dray Co., at $28,803 for structures.

Project No. 782 in Wilkes county, Porter & Boyd, Charlotte, low bidder at $110,349. Project No. 456 in Orange county to Crawford & Crawford, Mebane, N. C., at $17,442. Project No. 655 to Speed-Parker Co., Louisville, Ky., at $51,088.

Road to Connect With State Highway.

Florence, Ala., December 15—[Special.]—The Alabama State Highway Commission has approved the project of building a road from here to connect with the Bee Line highway from Nashville to Orlando. The State and Lauderdale county will each supply 25 per cent of the cost and the Government the other 50 per cent. In view of the expected expansion at Muscle Shoals it is desired to give the Tri-Cities proper connection with a trunk route. Government engineers have finished their survey for the new road and will submit estimates soon.

Notes on Good Roads Construction.

About $600,000 in road bonds are to be voted upon January 31, 1922, for work near Lake Wales, Fla. J. W. Turner, of Lakeland, is the engineer in charge.

Secretary Hoover has urged the governors of the various states to assist in awarding contracts for highway construction during the winter, not so much that actual construction be undertaken, but to permit contractors to place orders for tools, equipment and materials. Thus winter work will result from these orders to that extent unemployment will be relieved.

Eight miles of concrete, asphaltic and macadam pavement, costing approximately $425,000 will be laid in Pine Bluff, Ark., in the spring if present plans are carried out. Upon completion of this program a large portion of the residential section will have connected paved streets.

Figures compiled by the Bureau of Public Roads of the U. S. Department of Agriculture show that approximately $650,000,000 is available for road construction in the country next year, and this amount does not include street construction in the cities.

$2,000,000 Available for Road Improvements.

Pensacola, Fla., Dec. 17—[Special.]—According to Winston E. Wheat, county engineer, approximately $2,000,000 is available for road work in Escambia county, during this year and 1922. The amount now available for expenditure includes $500,000 county funds and a similar amount representing Federal aid. In all 80 miles of grading and paving will be undertaken in addition to the building of necessary culverts and bridges.

Oil Fields Active in Simpson County, Kentucky.

Franklin, Ky., December 10—[Special.]—There is renewed activity in the oil fields of Simpson county, owing to a stronger market and higher grades in new production; much of this tests 38 to 44 gravity, and brings $2.65 a barrel top for the Somerset light. New development is going on steadily, with fifty or sixty rigs busy in the county, which now has 175 producers. A few gassers are struck but are unimportant.

In the two years development of this field there has been little of the spectacular and this still holds good, wells flow from 25 to 500 barrels daily with very few dry holes. Drilling charges are down to $2 per foot, about half the price ruling a year ago, and the same applies to labor which is paid $5 to $8 a day. Pipe lines have also reduced charges. Leases run from one dollar to thirty-five dollars an acre. Oil is found at an average depth of 600 feet, making for low cost of production.

A new refinery of 500 barrels daily capacity will be built at once, located one mile from town. The present one is running 60 barrels, producing 1000 gallons of high-test gasoline and 600 gallons of kerosene. New pipe lines are being laid, one company now has thirty-three miles of lines serving a wide area, the loading rack being located at South Union, near here on the L. & N. track. An average of 2500 to 3000 barrels are handled daily, shipments going chiefly to Tennessee and Indiana. Many new operators are coming in from the West.

Extensive Improvements Planned for Mining Properties.

Parral Mexico, Dec. 9—[Special.]—As a result of a visit of inspection of the Parral & Durango Railroad and the mines and reduction mills of the Alvarado Mining and Milling Company and the Refugio Mining Company by a number of their officials and principal stockholders extensive improvement will be made to these properties. In the party were A. J. McQuatters of New York; Louis E. Stoddard and J. L. Day of New Haven, Conn.; Franklin Remington, president of the Foundation Company of New York and Tampico; J. F. Shaw and Dr. Kuno B. Heberline of New York, and E. G. Stanwood of Boston. Mr. Remington's presence with the party leads to the report that the Foundation Company is to be given the contract for constructing an extension of the Parral & Durango Railroad and for enlargement of the mining and milling properties.

LUMBER AND BUILDING MATERIALS

Southern Pine Production Up Slightly.

New Orleans, La., December 15—[Special.]—Reports from 135 mills of the Southern Pine Association for the week ended December 9 indicates sales totaling 2646 cars containing 56,079,324 feet, or an average order per mill of 415,402 feet compared with the average for the preceding week of 400,038 feet. The production for the week was 76,934,693 feet, or an average of 569,887 feet, while the average for the preceding week was 559,181 feet. Shipments amounted to 3170 cars containing 67,184,980 feet. Average shipments were 497,667 feet compared with the shipments compared with the shipments of the preceding week averaging 540,-613 feet.

Shipments were 12.67 per cent below production. Orders were 27.11 per cent below production and 16.53 per cent below shipments. The decrease in "orders on hand" during the week was 5.17 per cent.

	Cars	Feet
Orders on hand beginning of week.....	10,134	214,779,996
Orders received during week.....	2,646	56,079,324
Total	12,780	270,859,320
Shipments during week.....	3,170	67,184,980
Orders on hand end of week.....	9,610	203,674,340

Good Progress on Logging Railroad.

Elkins, W. Va., December 16—[Special.]—Capitalized recently at $800,000, the Spring Creek Lumber Company is making favorable progress on the construction of a railroad to its timber holdings aggregating about 10,000 acres on Spring Creek. Only about two miles of road remain to be built before the timber belt will be reached. This company has built a large mill and established a town at Spring Creek. W. Va. on the Greenbrier Division of the Chesapeake & Ohio Railway. The management believe that the road will be ready for operation and that the mill will be ready to saw logs about the time spring business begins.

Hardwood Lumber Market Optimistic.

Memphis, Tenn., December 17—[Special.]—Although the usual holiday lull in the hardwood lumber market has undoubtedly arrived, trading recently has continued at good rate and in excess of expectations. Everywhere the feeling prevails that activities will be renewed before the middle of January. Some firms say they have not yet felt any slackening, and predict good business during the holidays with only slight interruptions. The weather recently has been favorable to logging operations, but despite this fact those mills which resumed operations several months ago when there was decided improvement in demand for hardwood lumber have been unable to accumulate a substantial log supply. In the Helena section the loggers are only one to four days ahead of the mills, and the same condition prevails in other sections.

Independent loggers have not attempted to get out logs owing to the lack of advance in the price of lumber. It is said that the supply of logs along the railroads in Southeastern Arkansas is very small, estimated at probably 500,-000 feet compared with the normal available supply of 15,000,000 to 20,000,000 feet. Along the Yazoo and Mississippi Valley lines there is perhaps 1,000,000 feet where normally there is 40,000,000 feet at this time of the year. Under these conditions a prolonged wet spell will curtail production sharply.

Manufacturers are not inclined to sell at current prices because the feeling is general that there will be advances after the first of the year. Advances recently have been made in the face of a sub-normal demand, and have been due solely to badly broken stocks, and the lightest production in many years. It is predicted that unless production is increased prices will advance approximately $20 per 1000 feet, which would bring prices to about 50 per cent of the peak in 1920.

Building operations under way reach an enormous total and allied trades will be active for an indefinite period, it is said, and the furniture industry should be prosperous, thus insuring business for the hardwood manufacturer.

St. Louis to Modify Building Code.

A committee has been appointed for the purpose of modifying the building code of the city of St. Louis to permit less expensive construction in certain classes of buildings. J. A. Reheis, of the St. Louis Lumber Company, Julius Seidel, of the Julius Seidel Lumber Company, N. A. Boeckler, of the Boeckler Lumber Company, R. E. Gruner, of the Philip Gruner & Bros. Lumber Company and M. C. Neachan of the Goodfellow Lumber Company comprise the committee which has been appointed by the St. Louis Lumber Trade Exchange for the purpose of formulating and presenting suggestions having to do with the use of lumber in construction.

Will Resume Operation of Brick Plant.

H. E. Buck of the H. E. Buck Brick Manufacturing Co., Lake Charles, La., advises the MANUFACTURERS RECORD that the company will resume operation of its brick plant and material business leased to Delatte & Lagrange, Inc., for the past five years. Mr. Buck says: "The lease expires January 1. At that time we will resume operations of the plant. We manufacture building brick and deal in a full line of mason's materials."

Florida Lumber Mill to Resume Operations.

Dade City, Fla., Dec. 17—[Special.]—Operation of the rebuilt mill of J. L. Greer, about five miles from here, will be resumed shortly. When operating at capacity it has an output of approximately 40,000 feet daily, employing 130 men.

$2,500,000 in Contracts Awarded for Pipe Line Construction from Mexia Oil Fields to Gulf Coast.

Wm. Paul Gage, president and general manager of the Humphreys Pure Oil Pipe Line Co., Houston, Texas, advises the MANUFACTURERS RECORD of contracts awarded for a pipe line project that will involve the expenditure of between $2,000,000 and $2,500,000. An 8-inch pipe line will be constructed from the Mexia oil field to a Gulf terminal. The northern terminal will be near Teague, Texas, and the Gulf terminal at Smith's Bluff, south of Beaumont and north of Port Neches on the Neches River. The daily capacity of the line will be from 20,000 to 25,000 barrels. Necessary working tanks will consist of approximately ten or twelve of 55,000 barrels capacity each. The length of the line will be 200 to 225 miles.

Chas. Fitzgerald, Jr., of Houston, is the engineer, and E. A. Macpherson, Fort Worth, the general contractor. Additional contracts were awarded to the following firms: De LaVergne Machine Co., New York, engines; Gould Mfg. Co., Seneca Falls, N. Y., pumps; Marks Mfg. Co., Evanston, Ill., pipes and Youngstown Sheet & Tube Co., Youngstown, O., pipe. The construction of station buildings will be under the direct supervision of George H. Collins, Kansas City, Mo.

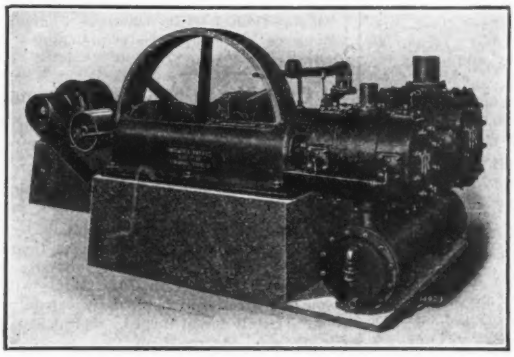
In connection with the pipe line project the erection of a private telephone and telegraph line of about 200 to 225 miles length will be necessary.

MECHANICAL

Air Compressor With Automatic Control.

A type of air compressor which includes many noteworthy features, one of them being the five-step clearance control, has recently been brought out and is illustrated in the accompanying picture. It also includes plate valves for both intake and discharge of air, while the clearance control regulates the output of the machine. The valves are supported during their entire operation in perfect alignment without any form of wearing guide, a very essential feature in the life of a valve.

The clearance control, it is observed, has been used with great success on the larger direct-connected electric motor driven compressors of the same manufacture. Under aver-



AUTOMATICALLY CONTROLLED AIR COMPRESSOR.

age working conditions the demand for compressed air is seldom steady and these conditions are successfully met by this control, which automatically loads or unloads the compressor in five successive steps, which steps are obtained by the reduction or addition of clearance space to the air cylinders. The compressor will thus operate at either full load, three-quarters, one-half, or one-quarter load, or no load, the reduction in intake being practically in proportion to the reduction in output capacity. This entire control is automatic and with it, it is stated, there is no loss of power from wasting air or leakage. When the compressor operates at part of its capacity some of the air is compressed into an added clearance space and on the return stroke this air expands, communicating its energy to the pistons. The inlet valves remain closed until the cylinder pressure equals the intake pressure, so inlet capacity is reduced without reducing intake pressure. An additional feature of this control is the maximum demand stop to prevent the compressor being operated at any greater load than desired. Thus the machine can be arranged for any desired load, keeping down its demand for power. As the control operates gradually it does not produce undue electric current fluctuation.

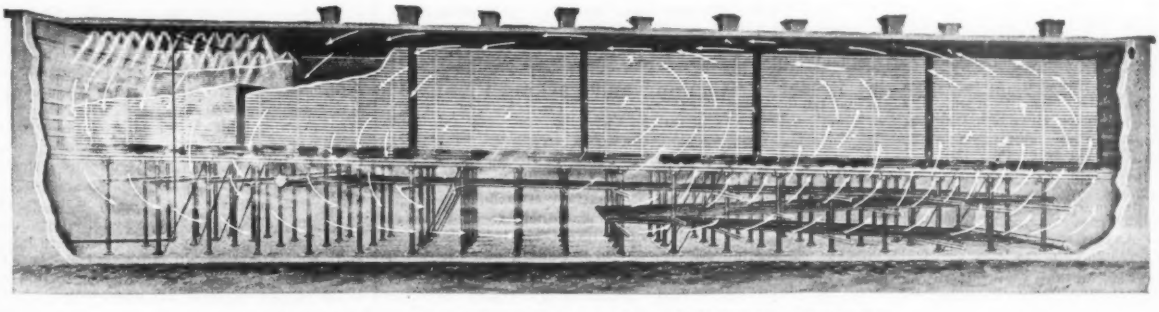
This type of compressor, known as "Imperial Type XCB" is manufactured by the Ingersoll-Rand Company, 11 Broadway, New York. It is belt driven and is furnished single stage for low pressures and two stage for higher discharge pressures. The piston displacement capacity for 100 pounds discharge pressure ranges from 610 to 1505 cubic feet of free air per minute. The compressor can also be made with a short belt drive attachment with floating idler.

Improved and Patented Dry Kiln.

An improved type of dry kiln has been patented covering important progressive features that are made apparent in the accompanying picture. It is of the progressive moist air type and its operation insures the heating of the wood through before the drying process is begun. This is done by at first subjecting the lumber to a fairly low temperature of high humidity, after which it is passed on gradually through an increasing temperature with decreasing humidity until drying is fully completed.

In this kiln, which is built by the Moore Dry Kiln Company, of Jacksonville, Fla., and Portland, Ore., the cold, green lumber first goes under the steam spray, which is shown at the left of the illustration, and this heats it to the very center in a high degree of humidity. This, it is stated, makes "the tissue plastic and relieves any case hardening." At this end of the kiln the downward circulation of air is natural and tends to equalize the moisture content of the material before the drying process commences. From this end of the kiln the lumber is advanced to the end shown at the right of the picture, its progress being accomplished through a gradually increasing temperature which is produced by means of three coils of pipe under the tracks, while at the same time the humidity is correspondingly lowered. By these methods it is asserted, the lumber is dried uniformly from center to surface without either case hardening or checking, and the wood retains its natural life and strength.

It is noted that the absence of heating coils at the "green end" of the kiln and also the cooling effect of evaporation from the cold, green lumber, put in daily, maintain a low temperature and high humidity; also that the kiln does not depend upon steam sprays for correct humidities, but it retains the moisture which is evaporated from the lumber, in sufficient quantities for ideal drying conditions. A temperature regulator on the steam supply will automatically control the temperature to suit any kind of wood. The arrows indicate the circulation of the air in the kiln, which is not produced by taking in cold air drafts or by employing mechanical aids, but is brought about by taking advantage of nature's law that causes hot air to rise and cold air to fall. Excess moisture goes out through automatic ventilator valves in the roof.



SECTIONAL VIEW OF THE NEW IMPROVED MOIST AIR DRY KILN.

Construction Department

EXPLANATORY.

The MANUFACTURERS RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

DAILY BULLETIN.

The Daily Bulletin of the MANUFACTURERS RECORD is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is $20.00 per year.

Airplane, Plants, Stations, Etc.

Tex., Knoxville—Hangar—Knoxville Aerial Corp. let contract to V. L. Nicholson, 711 Henley St. to build hangar.

Bridges, Culverts and Viaducts.

Fla., Pensacola—Escambia County will build concrete bridge with concrete abutments and earth approaches across Carpenter's Creek; bids until Jan. 10; Jas. MacGibbon, Clk. (See Machinery Wanted—Bridge Construction.)

Ky., Cloverport—Ky. State Highway Comsn., Frankfort, Ky., will build 250-ft. span bridge over Clover Creek in Breckenridge County; reinforced concrete abutments on creosoted piles; cost $90,000; bids opened Dec. 21. Lately noted. (See Machinery Wanted—Bridge Construction.)

La., Lake Charles—Calcasieu Parish, W. J. Prater, Prest. Police Jury will build Moss Bluff Highway Bridge across Calcasieu river including steel highway bridge and reinforced concrete or creosoted timber approach trestle across adjacent marsh, together with steel lift span with 94-ft. clear opening; entire structure will be 1450 ft. long and either 18 or 20-ft. in clear width; bids until Jan. 10. (See Machinery Wanted—Bridge Construction.)

Miss., Hattiesburg—Forrest County let contract to E. A. Ashley, Pinola, Miss. to build 120-ft. span bridge across Eouie Creek; 17-ft. roadway; steel and concrete. (Lately noted inviting bids.)

Miss., New Albany—State Highway Dept., Jackson, Miss. will build 2 concrete bridges on highway between New Albany and Memphis; bids until Dec. 29.

Miss., Vicksburg—Warren County will vote on $150,000 bonds for building bridges. Address Highway Comsn.

Mo., Benton—Scott County let contract to Cox & Tant, Sikeston, Mo., at $15,097.50 for building 16-ft. wood bent creosoted pile and 3 steel bridges; C. E. Swank, Engr., Charleston, Mo.

N. C., Edenton—North Carolina State Highway Comsn., Raleigh, N. C. let contract to P. R. Ashby, Raleigh, N. C., at $23,409.30 for building bridges in Chowan County; Project 113. (See Road and Street Construction.)

N. C., Morgantown—North Carolina State Highway Comsn., Raleigh, N. C. let contract to Southern Dray Co., Asheville, N. C., at $3,890.40 for building bridges in Burke County, Project 811. (See Road and Street Construction.)

N. C., Rutherfordton—North Carolina State Highway Comsn., Raleigh, N. C. let contract to Austin Bros. Bridge Co., Atlanta, Ga., at $5,215.80, for Project 879 involving bridge over Mountain Creek in Rutherford County (Lately noted inviting bids.)

N. C., Wentworth—Rockingham County Commrs. will sell $400,000 bonds for bridges and road construction; Wade H. Gentry, Register of Deeds.

Okla., Foraker—Osage Railway Co., Jas. P. Gallager, Ch. Engr. and Asst. Treas. let contract to J. A. Moore, to build bridges, trestles and culverts.

Okla., Strang—Mayes County Commrs., Pryor, Okla. plans selling $40,000 bonds for building bridge across Grand river.

S. C., Florence—Mars Bluff Bridge Board let bridge contracts as follows: Hyde & Baxter, Washington, D. C. for steel bridges; Chitwood & Palmer, Florence, S. C. for approaches, earth fill and concrete pavement; total cost $132,000; Johnson & Roberts, Engrs., Marion, S. C. (Lately noted.)

S. C., Orangeburg—Orangeburg County, L. K. Sturkie, Clk. will build bridges on Five Chop road including 200-ft. bridge and 2 culverts; bids opened Dec. 20. (See Machinery Wanted—Bridge Construction.)

S. C., Orangeburg—Orangeburg County will probably let contract to General Road & Drainage Contracting Co., S. C. for building bridge at $4850.

S. C., Sumter—Sumter County will probably let contract to Mallard Lumber Co., Greelyville, S. C., at $32,215 for building 9 reinforced concrete bridges. (Lately noted inviting bids.)

Tex., Abilene—State Highway Dept., Austin, Tex. approved plans for building 198-ft. reinforced concrete girder bridge over Mulberry Creek on Highway No. 1; cost $27,750; D. G. Hill, County Judge; H. E. Elrod Co., Consult. Engr., Dallas, Tex. (Previously noted.)

Tex., Alice—Jim Wells County contemplates voting on $600,000 bonds for bridge and road construction. Address County Commrs.

Tex., Denton—Denton County will build 240-ft. span bridge on Denton-Sherman road; low bidder F. P. McElwrath, Corsicana, Tex. at $21,339.72; Ed. I. Keys, County Judge.

Tex., Rusk—Cherokee County is preparing plans for construction of 125-ft. steel truss bridge over Angelina river between Cherokee and Nacogdoches Counties; cost about $17,500; C. F. Gibson, County Judge; Calvin E. Cocke, County Engr.

Canning and Packing Plants.

Ala., Brewton—Brewton Packing Co., capital $20,000, organized with J. E. Finlay, Prest.; A. B. McPhaul, V.-P. and Mgr.; W. Y. Lovelace, Secy.-Treas.; let contract to H. A. Pittman to construct 100x50 ft. frame building; purchased machinery to pack bacon, ham, dressed beef, lard, etc. (Lately noted J. E. Finlay, A. B. McPhaull, etc. organized company.)

Fla., Fort Myers—Fort Myers Packing Co., capital $25,000, incptd. with Harvey T. Montgomery, Prest.; Walter O. Sheppard, V.-P.; Wm. S. Creevey, Secy.-Treas.

Ga., Macon—R. L. Dolling Co., Columbus, Ohio, acquired R. F. Willingham plant; will expend $100,000 to improve for cannery for fruits and vegetables; C. A. Cheatham, Mgr.

Clayworking Plants.

La., Lake Charles—Bricks—H. E. Buck Brick Mfg. Co. will resume operation of plant Jan. 1, previously leased to Delatte & Lagrange, Inc., for five years; mfre. building bricks.

Okla., Ponca City—Bricks—Chamber of Commerce interested in establishing brick plant.

Coal Mines and Coke Ovens.

Ky., Calhoun—O. K. Coal Co., capital $25,000, incptd. by John R. Priest, Walter Scott and Joe H. Miller.

Tenn., Chattanooga—Dixie Coal, Lime & Clay Products Co., capital $750,000, incptd. by O. E. Thomas, Fred Bryan and W. H. Fox.

Tenn., Harriman—Lucky Strike Coal Co., organized with E. L. Watkins, Prest.; John L. Liggett, Secy.; J. M. Tate, Mgr.; will develop 600 acres coal land, daily capacity 100 tons. (Lately noted incptd., capital $15,000.)

Tex., Robertson County—Calvert Coal Co., J. B. Robinson, Mgr., Rockdale, Tex., main office Cumberland, Md. has 1381 acres coal land, will develop. (Previously noted incptd., capital $25,000.)

Va., Pulaski—Smokeless Coal Corp., G. H. Snider, Mgr. will develop 1444 acres coal land; later contemplate installing modern plant. (Lately noted chartered, capital $150,000.)

W. Va., Bluefield—Ricter Coal & Development Co., capital $10,000, incptd. by J. H. Price, William D. Poindexter and J. O. Lee, Jr.

W. Va., Charleston—Wilson-Smith Coal Corp., capital $20,000, incptd. by William E. Wilson, Howard H. Roberts, both Blossburg, Pa.; W. S. Schofield, Pottstown, Pa.

W. Va., Keyser—Northwestern Coal Co., capital $10,000, incptd. by George E. Wagner, H. H. Oates and A. K. Bazzle.

Concrete and Cement Plants.

Ark., Yellville—Fred B. Sanders will establish cannery; erecting cobblestone construction building.

Fla., Daytona—Concrete Bricks—Petrous Mfg. Co., Columbia, S. C. reported to establish branch plant for mfre. of concrete bricks.

Md., Baltimore—Concrete Products—American Concrete, Tile and Products Co., 426 New Amsterdam Bldg., capital $250,000, incptd. by John W. Ritter, John E. Springer and John T. Davis.

S. C., Columbia—Concrete Drainage Pipe, etc.—Palmetto Concrete Mfg. & Machinery Co., organized with H. C. Randolph, Prest.-Mgr., 1422 Henderson St., Columbia; W. C. Austin, Secy.-Treas., Anderson, S. C.; will erect 40x100-ft. and 30x90-ft. buildings, construction by day labor; install concrete mixer and electric motors, all purchased; mfre. concrete drainage pipe and road mchy. (Lately noted incptd., capital $10,000.)

Cotton Compresses and Gins.

Okla., Nuyaka—Biedelman Co., plans installing cotton ginnery.

Tex., Alice—Shepard Gin Co., will erect mill construction building; install 5-70 saw gins; daily output 100 bales cotton; Continental Gin Co., Archt., Dallas, Tex.; J. U. Shepard, Constr. Engr., Alice.

Tex., Seguin—Seguin Compress Co. increases capital from $40,000 to $80,000.

Tex., Wills Point—Wills Point Gin Co. increases capital from $10,000 to $15,000.

Drainage Systems.

Fla., Moore Haven—Moore Haven Drainage Dist. plan reclamation system embracing land in both Glades and Lee Counties; Elliott & Harmon, Chf. Engrs., Peoria, Ill.

Fla., Titusville—Brevard County Commrs. contemplates organizing drainage system to reclaim 62,912 acres; N. T. Froscher, Clk. Circuit Court.

Fla., Vero—Indian River Farms Drainage Dist., A. W. Young, Secy. issued $600,000 bonds to construct and improve existing drainage system. (Previously noted.)

Miss., Belzoni—Belzoni Drainage Dist. Commrs., S. Castleman, Prest., Citizens Bank and Trust Co. Bldg., will redredge and clean about 100 mi. dredged ditches; bids until Jan. 4; C. E. Miller, Engr. (See Machinery Wanted—Dredging.)

Miss., Yazoo City—Eden Drainage Dist. of Yazoo County let contract to J. A. Burt, Gunnison, Miss. to build 15½ mi. levee on east bank of Yazoo river, estimated cost $125,000; protect 11,300 acres land for farming use; install 2 automatic 8-ft. valves; Lamar Fontaine, Jr., Engr. Lately noted. (See Macninery Wanted—Valves.)

Electric Plants.

Ala., Mobile—Standard Gas & Electric Co., Chicago, Ill., plans expending $419,000 to establish branch plant.

Ark., Hardy—A. Sebert, Tuscumbia, Ala., applied for franchise to install electric lights and water-works.

Ark., Hot Springs—City, Mayor Jones will extend lighting system on Benton St. to Cottage, and on Malvern Ave. to Church.

Fla., De Land—De Land Electric Light, Power & Ice Co., is expending $75,000 to $80,000 to improve plant.

Fla., Fort Meade—City, Nat J. Patterson, Mayor plans installing electric plant.

Fla., Tarpon Springs—Southern Utilities Co., Geo. A. Louden, Mgr., Palatka, Fla., let contract to Arch Robinson, West Palm Beach, Fla., at $20,000, to improve plant; erect addition; purchased machinery; increase capacity from 200 to 440 K.W. (Lately noted enlarge plant.)

Fla., Williston—City will install lighting and water plant; vote Dec. 28 on $35,000 bonds. Address The Mayor.

Mo., Columbia—City let contract at $150,000 to install power plant. Address The Mayor.

N. C., Flat Rock—Associate Reformed Presbyterian Assembly, E. C. Stuart, Prest., Tampa, Fla., will install lighting, water and sewer system in school building.

N. C., Pilot Mountain—Town, Board of Commrs., P. E. Simmons, Secy., will erect light and power plant; voted $40,000 bonds; J. F. Kirkman, Mayor. (Lately noted to vote.)

N. C., Warsaw—City plans improving electric light and water systems; will issue $25,000 bonds. Address The Mayor.

Okla., Watonga—City issued $60,000 electric lighting system bonds. Address The Mayor.

Okla., Okarche—Okarche Light & Power Co., capital $10,000, incptd. by Geo. C. Hoebing, Jno. Barkstein and R. H. Hunter.

Okla., Woodward—City will install electric light plant and equipment; voted $100,000 bonds. Address The Mayor.

Tex., Corpus Christi—Corpus Christi Railway & Light Co., E. H. Eldridge, Mgr., will install 600-K.W. steam turbine in plant.

Tex., Edna—Edna Light, Ice & Water Co., will install 3-phase, 60-cycle, 2,300 volts to supersedes 220 volts, D. C.; install 120-H.P. Diesel engine; invites bids; increase ice plant capacity.

Tex., Groesbeck—City plans installing light plant. Address The Mayor.

Tex., Vernon—City, Harry Mason, Mayor, will construct electric light plant; vote Jan. 3 on $100,000 bonds. (Lately noted.)

Fertilizer Plants.

Md., Baltimore—Central Chemical Co., Hagerstown, Md., acquired plant of D. B. Martin; will improve to mfre. fertilizer.

Flour, Feed and Meal Mills.

La., New Orleans—Southern Rice Milling Co., 303 S. Peters St., will erect 4-story 90x65 ft. rice mill and 253x100 ft. warehouse; bids until Jan. 1, 1922; daily output 2400 bbls. rice: Morse Goldstein, Archt., Hibernia Bank Bldg.; Leo Weil, Constr. Engr. Lately noted. (See Machinery Wanted—Motors.)

Tex., Amarillo—Lester Stone Grain Co. and U. S. Strader Grain Co., purchased site; will erect 100,000 bu. capacity grain elevator.

Tenn., Knoxville—Security Mill & Feed Co., W. S. Howell, Gen. Mgr., increases capital from $100,000 to $175,000.

Tex., Jacksboro—Jacksboro Mill & Elevator Co. increases capital from $30,000 to $60,000.

Foundry and Machine Plants.

Fla., Archer—Foundry—Maddox Foundry & Machine Co., H. Maddox, Gen. Mgr. reported to erect 40x50-ft. fireproof building.

Fla., Orlando—Spraying Machines, etc.—Citrus Service Corp., capital $25,000, incptd. with Clay Binion, Prest.; C. L. Derby, Secy.-Treas.; mfre. spraying machines, agricultural implements, etc.

Fla., Vero—Machine Shop—Biendorf Machine Supply Co., Litchfield, Ill. reported to establish plant; moving plant from Litchfield; (Supersedes recent item.)

Ky., Hopkinsville—Pumps—Edwards Pump Co., incptd. by D. G. Edwards, Thomas C. Jones and John R. Foard.

Md., Baltimore — Bolts — Headless Bolt Corp., 19 N. Montford Ave. chartered by Ennis L. Ford, Edmund S. Windsor and Thomas J. Ewell.

Mo., Kansas City—Furnaces, etc.—E. K. Campbell Heating Co. will erect 75x130-ft. brick plant, tar and gravel roofing, concrete flooring, construction by owner; install electric lighting system; Carl Bolb & Bro., Archts.

Mo., St. Louis—Stoves, etc.—Joseph Forshaw Stove & Heating Supply Co., Joseph Forshaw, Prest. let contract to erect portion of 7 story building; completed plant to be 50x100-ft., total floor space of 50,000 sq. ft.; structure to be of extra heavy construction, reinforced concrete frame, faced with brick and terra cotta trimmings; install equipment, electric elevators, dumb waiters, heating plant, etc.; Albert B. Groves, Archt. (Lately noted to erect plant.)

S. C., Greenville — Tractors — Economy Tractor Co., capital $100,000, incptd. with W. C. Cleveland, Prest.; J. P. Hughes, plant Mgr.; leased temporary building, plans building plant.

Va., Richmond—Street and Railway Cars, etc.—Richmond Car Works, capital $500,000, incptd. with Lewis C. Williams, Prest.; purchased plant, will build railway, street and motor cars, fabricate architectural steel, mfre. iron and steel implements, etc.

Gas and Oil Enterprises.

Ky., Bowling Green—Amber Oil Co., capital $100,000, incptd. by A. H. Malaney, J. E. Waldron and B. J. White

Ky., Scottsville—M. M. Dyer Oil Co., capital $20,000, incptd. by M. M. Dyer, and F. W. and Ed. Cook.

Md., Baltimore—Talbott Oil & Gas Co., 502 Sun Life Bldg., capital $65,000, incptd. by Jno. E. Flaharty, E. Talbott Glass and W. Gordon Isaac.

Okla., Enid—Oil Service Petroleum Co., capital $25,000, incptd. by I. I. Arnold, H. D. Fleming and P. H. Shaklee.

Okla., Grandfield—Grandfield Oil & Refining Co. increases capital from $125,000 to $300,000.

Okla., Granite—Town plans establishing municipal gas plant; lay pipe; will vote on bonds. Address The Mayor.

Okla., Guymon—Panhandle Oil Co., capital $25,000, incptd. by Jno. F. McDonald, Jack Curtiss and E. D. Phillips.

Okla., Oklahoma City—Harrive Oil & Gas Co., capital $50,000, incptd. by C. P. Workman, C. E. Johnson and H. Irving Howard.

Okla., Oklahoma City—Mattson Oil Co., capital $25,000, incptd. by G. A. Mattson, T. W. Armstrong and V. A. Sparks

Okla., Okmulgee—Turman Crude Oil Co., capital $500,000, incptd. by W. S., Besie L. and Mabel E. Turman.

Okla., Okmulgee—United Petroleum Co., capital $12,500, incptd. by H. I. McClain, Okmulgee; C. A. Lewis and Paul Burton; both Tulsa, Okla.

Okla., Pawhuska—Petroleum Drilling Co., capital $25,000, incptd. by Lee Delong, Jas. M. Gardner and Geo. B. Melliott.

Okla., Tulsa—Cohen Oil Corp., capital $400,000, incptd. by Chas. B. Peters, Jas. R. Higgins and Jacques Martin.

Okla., Tulsa—Pipe Line—Osage Pipe Line Co., capital $500,000, incptd. by Grant McCullough, Willard and H. E. Foster.

Okla., Wewoka—Home Oil Co., capital $10,000, incptd. by B. D. Lack, E. S. Youngblood and J. F. Remy.

S. C., Spartanburg—Magnolia Oil Co., capital $25,000, incptd. with S. S. Hallman, Prest.; T. E. Trimmier, V.-P.; E. E. Hallman, Secy.-Treas.

Tenn., Murfreesboro—Rutherford County Oil Co., incptd. by Al. D. McKnight, A. L. Todd and M. E. Rubin.

Tenn., Nashville—Capital Phosphate, Oil & Gas Co., capital $250,000, incptd. by Walter O. French, J. R. Allen and J. E. Hill.

Tex., Orange—Pipe Line—Seaboard Oil & Refining Co., will construct pipe line from plant to oil fields.

Tex., Arlington—McKee Drilling Co., capital $15,000, incptd. by R. I. McKee, D. D. Hightower and W. C. Weeks.

Tex., Cameron—Refining—Owens Refining Co., capital $45,000, incptd. by Jno. S. Owens, Jno. H. Edwards and E. A. Wallace.

Tex., Del Rio—San Feupe Oil Co., capital $30,000, incptd. by J. L. Worthman, W. F. Jourdan and Matt Holman.

Tex., Houston—Oliver Hall Oil Corp., capital $50,000, chartered by Chas. H. Steding, F. P. Kalb and A. C. Hall.

Tex., Mexia—Pipe Line—Gulf Pipe Line Co., Pittsburgh, Pa., will construct 125 mi. 8-in. pipe line from Gulf coast; 25,000-bbl. capacity.

Tex., Mexia—Pipe Line—Humphreys Pure Oil Pipe Line Co., Wm. Paul Gage, Prest. and Gen. Mgr., 1006 Carter Bldg., Houston, Tex., let contract to E. A. MacPherson, F. & M. Bldg., Fort Worth, Tex., to construct 200 to 225 mi. 8-in. pipe line from Mexia field to Gulf Terminal; daily capacity 20,000 to 25,000 bbls.; erect ten or twelve 55,000-bbl. working tanks; Chas. Fitzgerald, Jr., Engr., 1006 Carter Bldg., Houston; let contract for machinery to: De La Vergne Machine Co., 2101-H. E. 138th St., New York, for engines; Goulds Mfg. Co., 71 W. Fall St., Seneca Falls, N. Y., for pumps; Marks Mfg. Co., Evanston, Ill., and Youngstown Sheet & Tube Co., Youngstown, Ohio, for pipe; Geo. H. Collins, Massachusetts Bldg., Kansas City, Mo., supervise construction station building; also construct 200 to 225 mi. private telegraph and telephone line; total cost $2,000,000 to $2,500,000. (Lately noted.)

Tex., Mexia—Texas Crude Oil Co., capital $10,000, incptd. by J. A. Elkins, W. A. Parrish and C. M. Hightower; all Houston, Tex.

Tex., Minerva—Refinery—Owens Refining Co., Jno. S. Owens, Prest.-Mgr., First National Bank Bldg., Cameron, Tex., will erect 1200-bbl. daily capacity oil refinery; W. A. Jones, Constr. Engr. (Lately noted.)

Tex., Orange—Thomas Oil Co., capital $50,000, incptd. by J. H. Thomas, Dell Scott and H. H. Booker.

Tex., Port Arthur—Port Arthur Petroleum Co., capital $50,000, incptd. by C. C. Harrell, Julius Deutser and Davis Button.

Tex., San Antonio—Home Oil Co., increases capital from $100,000 to $200,000.

Tex., Wichita Falls—Olata Oil Co., increases capital from $25,000 to $37,500.

W. Va., Bridgeport—Bridgeport Natural Gas & Oil Co., increases capital from $25,000 to $150,000.

W. Va., Bridgeport—Stout Gas Co., capital $15,000, incptd. with C. A. Lawson, Prest.; Arden Teter, Secy.-Treas.

W. Va., Wheeling—Consumers Gas & Oil Co., incptd. by E. S. Romine, J. L. Kirkland and Fred. G. Stroehman.

Hydro-Electric Plants

Ga., Valdosta—F. E. Hatch, Albany, Ga. will develop hydro-electric power on property known as Eanks Mill Pond.

Mo., Bagnell—Osage Power Co., Lamar, Mo. plans power development on Osage river to include 40,000 H.P. and 2 small auxiliary plants; 7,000 ft. tunnel, 3 dams, transmission lines, etc.; R. Williams, Conslt. Engr., Lamar.

Ice and Cold-Storage Plants.

Mo., Kansas City—A. L. Williams will erect 150x150-ft. 1 story ice plant; estimated cost $20,000.

Mo., Joplin—Abner Thomas, Prest., Thomas Fruit Co., plans remodeling brewery into cold storage plant, estimated cost $75,000; Charles A. Moore, Engr., 646 Plymouth Bldg., Minneapolis, Minn.

S. C., Marion—Marion Cotton Oil Co., C. G. Drumwright, Mgr. reported to install 25 to 30 ton ice plant.

Tex., Dallas—American Ice Co., capital $75,000, incptd. by C. E. Kennemer, H. B. Fisher and George Miller.

Tex., Edna—Edna Light, Ice & Water Co., contemplates increasing ice making capacity, invites bids for 120 H.P. Diesel engine.

Irrigation Systems.

Tex., Corpus Chrsti—Nueces County Water Improvement Dist. No. 3 voted $300,000 bonds for irrigation and water systems. (Previously noted to vote.)

Land Developments.

Ala., Gadsden—City, Mayor Stevenson, may enlarge Moragne Park; contemplates purchasing 17 lots adjoining; $5000 available.

Ala., Montgomery—Henry G. Jones plans developing 400-acre site; E. S. Draper, Landscape Archt., 11 E. 5th St., Charlotte, N. C.

Fla., Bartow—Meadowoaks Farms, M. O. Chase, Secy., Treas. and Gen. Mgr., will expend $25,000 to develop 500-acre site near Bartow; erect barns, dairy, creamery, etc. (Lately noted incptd., capital $40,000.)

Fla., Daytona Beach—City plans expending $5000 to develop 250x200 ft. site, for playground and park; erect pogoda, band stand, etc.; plant trees. Address The Mayor.

Fla., Miami—Geo. E. Merrick, will develop 1600-acre site for suburban residences; expend $250,000 to construct spanish bungalows; H. Geo. Fink, Archt.

Fla., Polk County — Florida National Groves, care of Florida National Bank, Jacksonville, capital $60,000, incptd. with Giles L. Wilson, Prest.; J. L. Dart, V.-P.; H. F. Stratford, Secy.-Treas.; will develop 40-acre site for citrus groves; approximate cost $40,000 to $50,000.

Fla., Tampa—Buckeye Nurseries, Geo. R. McKean, Secy., increases capital to $2,500,000.

Fla., Tyler—Gwinn Farm, capital $100,000, incptd. by Ralph W. Gwinn, 522 5th Ave., New York; J. T. Westermann, Engr., Tyler; develop 27,000-acre site. (Lately noted under Gainesville, Fla.)

Fla., West Palm Beach—City, Karl Riddle, Mayor, will improve parks and boulevards; bids until Jan. 1, 1922; H. C. Fugate, Engr. (Lately noted to vote on bonds.)

Ga., Columbus—Columbus Water Supply Co., Chas. F. Jordan, Supt., will develop 8-acre site at municipal water-works, on River Road, for park; construct terraces, storm drainage system and appurtenances, driveways, walks, paths, etc.; construction by day labor; J. B. Ryer, Jr., Landscape Engr.

Ga., West Point—Mrs. Clarence Hudmon will develop estate; E. S. Draper, Landscape Archt., 11 E. 5th St., Charlotte, N. C.

Ga., West Point—Mrs. J. L. Askew will develop estate; E. S. Draper, Landscape Archt., 11 E. 5th St., Charlotte, N. C.; L. W. Roberts & Co., Archts. for house, Atlanta, Ga.

Miss., Biloxi—Biloxi Civic Club, Mrs. Byrd Enochs, Prest., plans establishing park at Back Bay and Charter St.; construct arch; plant palms.

Miss., Moselle—Missky Nut & Fruit Orchard Co., capital $50,000, incptd. by E. C. Waggoner, H. L. Bates; both of Moselle; J. W. Andrews, Mayfield, Ky.; acquired 500-site; will plan pecan, berry and peach trees.

N. C., Hickory—Hickory Country Club plans expending $35,000 to develop 60-acre site west of Hickory for country club, including 9-hole golf course; L. R. Rink, Res. Engr.; E. S. Draper, Landscape Archt., 11 E. 5th St., Charlotte, N. C.; Donald Ross, Conslt. Golf Archt., Pinehurst, N. C.

N. C., Hickory—A. A. Shuford will develop tract adjacent to country club; development includes, roads, parks, etc.; E. S. Draper, Landscape Archt., 11 E. 5th St., Charlotte, N. C.

W. Va., Spanishburg—Mercer County Court let contract to McClintic Marshall Co., Pittsburgh, Pa., at $76,000 for building bridge.

Lumber Manufacturing.

Ark., Greenwood—Greenwood Lumber Co., capital $10,000, incptd. with J. W. McGhee, Prest.; W. J. Stewart, Secy.-Treas.

Ga., Woodland—J. W. Starr & Sons, 4th National Bank Bldg., Atlanta, Ga., let contract to erect 30x60-ft. building, wooden construction, tin roof; install 50,000 ft. daily capacity planing mill; purchased. Lately noted to erect planing mill. (See Machinery Wanted—Engine; Boiler.)

Miss., Pelahatchie—Mercantile Lumber Co., J. T. Allen, Propr., Jackson, Miss. (lately noted burned) will rebuild 20x104-ft. 2 room, dry kilns, wood construction; capacity 30,000 ft.; bids open. (See Machinery Wanted—Dry Kiln Fixtures.)

W. Va., Spring Creek—Spring Creek Lumber Co. has mill and established town for developing 10,000 acres timber tract; has under construction railroad to timber belt.

Metal-Working Plants.

D. C., Washington—Safety Device—Universal Safety Device Corp., capital $100,000, chartered by Peter A. Drury, Charles Hunt and Samuel J. Henry.

Md., Baltimore—Gas Guard—Safety Gas Guard Co., Room 217 Courthouse, capital $25,000, incptd. by Harry H. Freedman, Henry Fedder and Simon E. Soberloff.

Md., Baltimore—Metal Novelties—National Selling Co., Calvert Bldg., capital $10,000, incptd. by Sidney L. Nyburg, Alice S. Eason and Archibald Sykes.

Md., Baltimore—Metal Products—Ziraloy Co., 1227 Calvert Bldg., capital $50,000, incptd. by Ferdinand I. Gruebel, Robert E. L. Young and Anna Schaffel.

Md., Baltimore—Silver Plating—Wm. J. Eisenhardt let contract to E. Eyring & Sons, 3501 Faith Ave. at $25,000 to construct 26x120-ft. building; brick and mill construction; slag roofing; wood floor; steam heating plant; electric lighting, Geo., R. Callis, Jr., Archt., 611 American Bldg.

Md., Baltimore—Utensils — Household Specialties Co., 1716 E. Fayette St., incptd. by Max and Solomon Wolberg.

Mo., St. Louis—Office Fixtures, etc.—Globe Store & Office Fixture Co., Nathan Bloom, Prest. leased additional space, will install mchy. all purchased.

Okla., Tulsa—Shock Absorbers—Mid-Continent S & S. Shock Absorber Co., capital $15,000, incptd. by E. K. Roth, W. R. Guiberson and S. P. Tschappat

Okla., Tulsa—Oil Burners—Evans Oil Burner Co., capital $15,000, incptd. by G. C., M. L. and Clyde Evans.

Tenn., Chattanooga—Enamelware, etc.—Crane Enamelware Co. applies for $2,000,000 charter by Frank H. Caldwell, J. J. Mahoney and Hugh W. Powell; will use established local plant; mfre. bathtubs and other large units in connection with their present output plumbing supplies; reported to change name from Mutual Enamelware Co.

Tenn., Knoxville—Torpedoes—A. Y. Barrows, Knoxville, and C. M. Jones, Detroit, Mich. interested in organization of $500,000 company to mfre. aerial torpedo; Jefferson Kinsel, Inventor, Clairfield, Tenn.

Tex., Wichita Falls—Spark Plugs—Self Cleaning Spark Plug Co., 904 American National Bank Bldg. (lately noted incptd.) or-

ganized with S. Walker, Prest.-Mgr.; F. D. Woodruff, Secy. has temporary plant to mfre. special spark plug. (See Machinery Wanted —Spark Plug Material.)

Mining.

Ark., Benton County—Copper—Page Milling & Smelting Co., Fort Smith, Ark. has leases on 570 acres copper lands; reported to develop, installing 150 ton concentrating mill, also plans building town.

Ark., Benton—Sand and Gravel—Benton & Saline River R. R., capital $75,000, incptd. by J. J. Ball, W. D. Cammock and John M. Davis, road is for development of sand and gravel deposits of Ball-Benton Gravel Co.

Ky., Pineville—Long Wall Mining Co., incptd. by Still Gooch, James Gabbard and N. R. Patterson.

Ky., Summit—Asphalt—W. H. Glitner, Louisville, Ky. has leases on several hundred acres of asphalt deposits, plans extensive developments; establish plant with initial capacity of 1000 tons finished product daily.

Ky, Williamsburg—Southern Mining Co., capital $30,000, incptd. by T. B. Mahan, N. E. Perkins and F. E. Gatliff.

Tenn., Memphis—Zinc—Clinch River Zinc Co., capital $500,000, incptd. by John Cunningham, Arlington, Tenn.; P. R. Cary and H. D. Bird, both Memphis, Tenn.

Va., Staunton—Lime Products—Staunton Lime Products Co., N. C. Taylor, Mgr. increased capital $50,000.

W. Va., Parkersburg—Gravel—Ohio Gravel Co., capital $1,000,000, incptd. by Walter L. Ernest, Harry Nicely and J. D. Ankrom.

Miscellaneous Construction.

Ala., Montgomery—Stadium—Junior Chamber of Commerce interested in building stadium for general athletic games.

Fla., Jacksonville—Storage Tank—Eppinger & Russel Co., 165 Broadway, New York, let contract to Petroleum Iron Works, Sharon, Pa. at $15,000 to construct six ring steel storage tank, cone shape, 76 ft. 4½-in. diam., 30 ft. 4½-in. high; material all purchased.

Fla., Jupiter—Inlet—Jupiter Special Dist. of Palm Beach County, reported voted $100,000 bonds to open Jupiter inlet permanently to navigation. Address West Palm Beach Commrs.

Fla., New Smyrna—Canal—City, M. B. Pringle, Mgr. will cover canal, sides to be walled with concrete; cement sidewalks on top; estimated cost $30,000; bids open about Dec. 22. Previously noted to issue $25,000 warrants. (See Machinery Wanted—Canal Construction.)

Fla., Sanford—Pier, etc.—Chamber of Commerce interested in constructing pier and boat basin; W. T. Donnely, Marine Engr.

Fla., Tarpon Spring—Docks, etc.—City, Willis Castaing, Mayor let contract at $236,000 to J. B. McCrary Engineering Co., Atlanta, Ga. to construct concrete dock at foot of Tarpon Ave., concrete retaining wall and side walk around Spring Bayou, concrete dock on Anclote River at Sponge Exchange also about 3 mi. street paving; Harry McCreary, City Supt. and Mgr.

Fla., West Palm Beach—Sea Wall—City, Karl Riddle, Mgr. will construct $100,000 sea wall, bids open about Jan. 1. (Lately noted to vote on $50,000.)

Md., Baltimore—Port Development—Port Development Comsn., John E. Greiner, Chrmn. requested plans by Edwin J. Clapp and Francis Lee Stuart, both New York be made public; development includes construction of piers, 10 story concrete cold-storage warehouse, floating elevators, etc.

Mo., Jeffierson City—Canal, etc.—City, Paul C. Hunt, Mayor plans repairing and extending Miller Street Canal, also repairing Elm St. bridge; contemplate $80,587.99 bond issue.

Miss., Meridian—Radial Chimney—Mississippi State Bond Improvement Comsn., Jackson, Miss. will construct 100 ft. radial brick chimney on grounds of East Mississippi Insane Hospital; bids open; Theo. C. Link, Supvg. Archt., Box 636, Jackson, Miss.

Miss., Sanatorium—Radial Chimney—Mississippi State Bond Improvement Comsn., Jackson, Miss. will construct 125 ft. radial chimney on grounds of tuberculosis sanatorium; bids open; Theo. C. Link, Supvg. Archt., Box 636, Jackson, Miss.

N. C., Hendersonville—Dam—Stoney Mountain Co. plans building 28x200-ft. dam in connecton with developing summer resort; W. T. Shipley in charge.

Okla., Tulsa—Dam—Oakhurst Country Club plans to build dam to impound water from two gorges making lake ¾ mi. long, and from 200 to 400 ft. wide, to afford swimming, boating, fishing, etc.; C. E. Griggs and W. H. Holoway, Consit. Engrs

Tex., Galveston—Breakwater, etc.—Treasury Dept., Supvg. Archt.'s Office, Washington, D. C. let contract to John Jacobson at $23,893 to construct 50 ft. piling jetty to act as breakwater and renew heavy riprap at U. S. Quarantine Station; Dr. P. B. Mossman, in charge. (Bids lately noted.)

Tex., Kerrville—Tunnel—Building Board, of American Legion Memorial Hospital, S. B. Cowell, Chrmn., Austin, Tex. let contract to Elder Construction Co., Dallas, Tex. at $26,370 to construct tunnels for steam pipes and conduits; Phelps & Dewees, Archts., Gunter Bldg., San Antonio, Tex.

Tex., Rockdale—Levee—Gabriel Valley Producing Co. plans rebuilding 3 mi. levee for protection of plantation.

Va., Norfolk—Dredging—Jones Dredging Co. awarded contract to deepen waterfront of navy yard; about 200,000 cu. ft. to be dredged.

Miscellaneous Enterprises.

Ala., Birmingham—Laboratories—Barthel Laboratories, capital $150,000, incptd. with G. B. Fewell, Prest.; Thomas H. Vaughn, Secy.-Treas.

Ala., Gadsden—Heating, etc.—American Warming & Ventilating Co., capital $25,000, incptd. with Peter B. Bogart, Prest.; O. D. DuPree, Secy.

Ark., Camden—Printing—Hurley Printing Co., capital $25,000, incptd. by Curtis B. Hurley, Prest; Fred D. James, Sec.-Treas.

D. C., Washington—Sign Service—National Sign Service, capital $100,000, incptd. by H. S. True, J. R. Wood and E. C. Jahn.

Fla., Lakeland—Hardware, etc. — Eagle Roofing & Plumbing Co., capital $25,000, incptd. with George W. Malloy, Prest.; C. W. Lakeland, Secy.-Treas.

Ky., Burnside—Transportation—Luttrell & Dicken Transportation Co., capital $10,000, incptd. by R. I. Luttrell, John O. Dickens.

Ky., Louisville—Printing—Standard Printing Co., D. B. G. Rose, Prest. has under construction 70x100-ft. plant addition; concrete, fireproof throughout; estimated cost $150,000.

La., Alexandria—Transportation—Interurban Transportation Co., incptd. with Morgan W. Walker, Prest.; F. Gaston Chatelain, Secy.-Treas.

La., New Orleans—Incinerator—Dept. of Public Finance, R. M. Murphy, Commr. will install incinerator including traveling crane and electric generating equipment complete; bids until Jan. 4; John Klorer, City Engr. (See Machinery Wanted—Incinerator.)

Md., Baltimore—Dyers and Cleaners—Universal Dyers & Cleaners, 359 Calvert Bldg., capital $50,000, incptd. by Abe Polansky, Isaac and Morris Cohen.

Md., Baltimore—Motion Plays—Commonwealth Film Corp., 11 S. Gay St., capital $30,000, chartered by Robert H. Whistling, Harry C. and Masie A. Mann.

Md., Baltimore — Stevedoring — Marine Stevedoring Co., 415 National Marine Bank Bldg., capital $25,000, incptd. by Wm. R. Wiest, William F. Cochran and William Muehlhause.

Md., Cumberland—Amusements — National Amusement Co., 52½ S. Center St., capital $150,000, incptd. by Wm. P. Roeder, Phillip J. Arendes and John J. Herboldsheimer.

Md., Cumberland—Dairy—Farmers Dairy Products Co., 26½ Polk St.,capital $20,000, incptd. by Samuel L. Cessna, Stanley A. Koontz and S. Edward Speelman.

Md., Silver Springs—Building Supplies—Silver Springs Building Supply Co., capital $150,00, incptd. by James H. Cissel, E. Brooke Lee and Frank L. Hewitt.

Md., Towson — Publishing — Jeffersonian Publishing Co. increased capital from $30,000 to $40,000.

Okla., Apperson — Laundry — Apperson Laundry & Dry Cleaning Co., capital $15,000, incptd. by Robert Evans, Jesse J. Worten and L. F. Roberts, all Pawhuska, Okla.

Okla., Oklahoma City—Window Cleaning—Oklahoma City Window Cleaning Co., incptd. by Effa Alexandria, Mike and Nellie Bartay.

Okla., Tulsa—Building Materials—Midwest Building Materials Co., capital $25,000, incptd. by Edwin B. Quick, Charles A. and R. Wesley Sanderson.

Okla., Tulsa—Health Appliance Mfg. Co., capital $50,000, incptd. by C. B. Farguharson, L. C. Propst and Ed. N. Day.

Tenn., Huntsville—Scott County Development Co., capital $40,000, incptd. by C. A. Stanton, H. McCurdy and William Todd.

Tenn., Knoxville — Hardware — Sterling-Crumbliss Hardware Co. increased capital from $70,000 to $150,000.

Tenn., Memphis—Electrical Contracting, etc.—Liberty Electric & Mfg. Co., 95 N. 3rd. St., let contract to Theo. Coltura, 231 Lucerne St., at $10,000 to erect 50x150-ft. brick and concrete building, composition roofing; has equipment for electrical contracting and rewinding.

Tenn., Nashville—Transfer—Wolberg-Frank Transfer Co. incptd. by Nathan Wolberg, Manuel Frank and A. T. Levine.

Va., Charlottesville — Incinerator — City plans erecting incinerator. Address The Mayor.

Va., Danville—Undertaking—T. A. Fox & Son let contract to Anderson Hunter Construction Co. to erect 2 story and basement 34x80-ft. building; E. R. James, Archt.

Va., Lynchburg—Laundry—Pure White Wet Wash Laundry Co., incptd. with R. L. Williams, Prest.; H. E. Williams, Secy.

Va., Radford—Laundry—American Steam Laundry Co. organized with W. H. Painter, Prest.; W. W. Seaver, Secy.-Treas.; C. E. Cregger, Mgr., will erect plant in 1922; construction by owners; mchy purchased. (Supersedes recent item.)

Va., Roanoke—Cleaning, etc. — Peacock Cleaning & Dyers, capital $20,000, incptd. with A. M. Flippin, Prest.; George S. Hurt, Secy.

W. Va., Charleston—Interstate Specialty Co., capital $100,000, incptd. by O. J. Cox, C. E. Garten and Robert Miller.

Miscellaneous Factories.

Ark., Fort Smith—Cigars—Peerless Cigar Co., 405½ Garrison Ave., organized with Gus Krone, Prest.; W. J. Doyle, V.-P. and Mgr.; E. E. Weldon, Secy.; H. C. Selig, Treas.; has plant to mfre. cigars. Lately noted inctpd., capital $10,000. (See Machinery Wanted—Cigar Containers; Cigar Mfrs. Supplies.)

Ark., Tex., Texarkana—Creamery—E. C. Fulkerson, Cainesville, Mo., interested in establishing creamery. (Lately noted Chamber of Commerce interested.)

Fla., Bartow — Creamery — Meadowoaks Farms, M. O. Chase, Secy., Treas. and Gen. Mgr., plans establishing creamery. See Land Development. (See Machinery Wanted—Creamery Equipment.)

Fla., Boynton—Creamery — Co-operative Dairy & Creamery Assn. of Palm Beach County, capital $50,000, incptd. with Ward B. Miller, Prest.; Hugo Stegman, V.-P.; Chas. F. Knuth, Secy.-Treas.

Fla., Haines City—Chemicals—Rex McDill Co., capital $200,000, incptd. with Rex D. McDill, Prest. and Gen. Mgr.; Josephine McDill, V.-P. and Treas.; Fred. J. Hampton, Secy.; all Tampa, Fla.

Fla., Tallahassee—Ice Cream, etc.—Leon County Milk Co., J. M. Burgen, Mgr., has 60x30 ft. building, costing $5500; purchased creamery equipment; will install to mfre. ice cream, etc. (Lately noted.)

Fla., Tampa—Beverages—United Beverage Co., capital $100,000, incptd. with E. S. Srour, Prest.; G. E. Mabry, V.-P.; R. S. Dunlap, Secy.-Treas.

Fla., West Palm Beach—Bakery, etc.—Gibson Baking & Ice Cream Co., organized with W. T. Gibson, V.-P., Treas. and Mgr., will expend $3000 to erect 40x25 ft. concrete block construction plant addition; install $6000 refrigeration plant. (Lately noted inctpd., capital $75,000.)

Ky., Louisville—Soap—Checker Soap Co., incptd. by Wm. Yutz, Louisville; Jake Grassmick, Oakdale, Ky.

La., Monroe—Dairy Products—Monroe Milk Station, incptd. with J. B. Filhiol, Prest.; Genie A. Miller, V.-P.; T. H. Moore, Secy.-Treas.

Md., Baltimore—Dairy Products—Cloverfield Farms Dairy, 2802 Rayner Ave., capital $50,000, incptd. by Geo. Sheeler, Jos. O. Butterbaugh and Minnie Lample.

Md., Baltimore—Shoes—Muskin Shoe Co., 427 E. Oliver St., acquired 5th and 6th floors of building at Pratt & Greene Sts.; will purchase about $30,000 machinery; increase daily output fro 3,100 to 6,000 pairs shoes.

Md., Baltimore—Clothing—Beacon Mfg. Co., 217 Courthouse, capital $25,000, incptd. by Nathan Schwartz, Harry L. Hirsch and Wm. B. Henkel.

Md., Baltimore—Clothing — Bogart-Weinberg Corp., Baltimore and Gay Sts., capital $20,000, incptd. by Solomon A. Bogart, Woolf and Max Weinberg.

Md., Baltimore—Macaroni—Kerr Macaroni Mfg. Co., 3545 Greenmount Ave., capital $40,000, incptd. by Ignazio and Antonio Papania and Jos. Di Girolamo.

Md., Baltimore—Pharmaceutical Products—Calenduline Mfg. Co., Equitable Bldg., capital $200,000, incptd. by Thos. Henry Ennis, Ernest Leslie Palmore and Wm. Gluck Gordon.

Md., Baltimore—Waste Products—Cities By-Products, 342 Equitable Bldg., capital $50,000, incptd. by David Hughes, Chas. D. Harris and Morris S. Snyder.

Miss., Vicksburg—Ice Cream—Sutton's Ice Cream Factory, S. N. Sutton, Propr., plans expending $10,000 for refrigerating plant, battery of new freezers and additional pasteurizing machines.

Mo., Kansas City—Brooms—Kansas City Broom Co., A. L. Bennett, Mgr., will extend plant; leased 2d and 3d floors 145x50 ft. building; 15,000 ft. floor space.

N. C., Charlotte—Loft Building—Jno. W. Fox, Southern Power Co., 511 5th Ave., New York, plans expending $135,000 to erect loft building; 7 stories, with 7000 ft. floor space to each story; equip with lights, power, water, etc.; install machinery; Lockwood, Greene & Co., Archts., Healey Bldg., Atlanta, Ga.

N. C., Gastonia—Bakery—Carolina Baking Co., Mgr. Carroll, E Airline Ave., will install additional bread oven on ground floor; cake oven on 2d floor; double plant capacity.

N. C., Gastonia—J. B. Beal is constructing 2-story 50x36 ft. addition, and erecting additional story to present building, occupied by Carolina Baking Co.

N. C., Hamlet—Medicine—Hamlet Medicine Co., organized with $10,000 capital.

N. C., Lenoir—Creamery—Caldwell County Co-operative Creamery Co., organized by W. J. Lenoir, Lenoir; T. J. Moore, Collettsville, N. C.; R. W. Watts, Patterson, N. C.

N. C., Raleigh — Tobacco — American Tobacco Co., will enlarge stemmery.

Okla., Muskogee—Baking—Armon Baking Co., incptd. by A. Cole, R. G. Alexander and S. B. Wallick.

Okla., Tulsa—Tanning—Oklahoma Tanning & Mfg. Co., purchased plant of Pawpaw Refining Co.; will install additional machinery to tan hides; daily output 250 hides.

S. C., Anderson—Cigars—F. H. Lesser, Waterville, Maine, plans establishing cigar factory.

S. C., Chester—Chamber of Commerce interested in establishing $10,000 creamery.

S. C., Columbia—Medical Preparations—Kuykendal Chemical Co., 724 Main St., organized with C. M. Kuykendal, Prest.-Treas.; F. R. Kuykendal, V.-P. and Secy.; establish plant; install mixing and bottling outfit; labeling machinery; mfre. medical preparations. Lately noted incptd., capital $50,000. (See Machinery Wanted—Cartons; Bottles; Advertising Material; Signs; Folders; etc.; Shipping Cases; Labels; Wrappings; Drugs.)

S. C., Greenville—Bakery—Electrik Made Bake Shop, Hays Reynolds and Geo. K. Fellers, Proprs., acquired building; will remodel for bakery.

Tenn., Bristol—Bakery—Hecht's Bakery, Herman Hecht, Owner, is expending $75,000 to erect 2 story 80x90 ft. bakery; Max Marks, Mgr.; Richard Griesser, Archt., 64 W. Randolph St., Chicago, Ill.

Tenn., Chattanooga—Paper—Southern Cotton & Paper Co., capital $200,000, organized by Mercer Reynolds. (Lately noted to establish plant.)

Tenn., Harriman—Brushes—Fuller Brush Co., R. L. Meyer, Representative, Hartford, Conn., will establish branch plant to mfre. brushes.

Tenn., Memphis—Factory Buildings—P. F. Crenshaw, Secy.-Treas., Chickasaw Candy Co., will erect first two units of four factory buildings; each to be 3-story 150-100-ft. brick and mill construction, with reinforced concrete columns and footings; approximately 30,000 sq. ft. space; install electric elevators and gravity chutes; plans and specifications by E. L. Harrison, Archt.-Engr.

Tenn., Morristown—Bakery — Skelton's Bakery Co., capital $40,000, incptd. by J. L. Skelton, W. D. Bushong and C. M. Easley.

Tenn., Murfreesboro—Creamery — Rutherford County Creamery Assn., C. H. Haynes, Prest., increased capital from $10,000 to $50,000; is expending $25,000 to construct addition to plant.

Tex., Fort Worth—Air Seat—Ventilated Air Seat Co., incptd., by S. J. Wilson, C. E. Layton and H. E. Brown.

Tex., Galveston—Mattresses, etc.—Galveston Upholstering Co., 3802 Ave. R½., let contract to M. C. Bowden to construct 2-story frame construction plant addition; install $5000 felting machine; construct drying room, etc. mfre. mattresses.

Tex., Mexia—Drugs—Mexia Drug Co., capital $20,0000, incptd. by Benton Jones, Paul Lobitt and R. B. Jackson.

Tex., Oak Cliff, Dallas—Chinaware—Oakcliff Chinaware, Novelty & Pottery Co., plans expending $25,000 to erect 2-story factory building.

Tex., Santa Anna—Industrial Dept., Santa Fe Ry., plans establishing glass factory; F. E. Brazelton, interested.

Va., Graham—Bottling—Three-C Nectar Bottling Corp., M. D. Hinton, Secy., plans enlarging and improving plant. (Previously noted.)

Va., Graham—Chemicals—Columbia Chemical Co., Mose Hankins, Mgr., Roanoke, Va., contemplates improving plant.

Va., Lynchburg—Paints, etc.—Lynchburg Paint & Color Corp., capital $25,000, chartered with A. T. Quick, Jr., Prest.; H. B. Hughes, Secy.

Va., Richmond—Ice Cream—Horn Ice Cream Co., H. W. Hofferbert, Prest., 446 N. Aisquith St., Baltimore, Md., plans expending $500,000 to establish branch plant.

Va., Richmond—Millinery, etc.—Roselle, capital $10,000, incptd. with Rose P. Walters, Prest.; Jno. N. Walters, Secy.

W. Va., Mullens—Bottling—Mullens Bottling Works, J. A. Radwan, Mgr., let contract to erect 100x30 ft. fireproof building; purchased $12,000 to $15,000 machinery; will install. Lately noted incptd., capital $25,000. (See Machinery Wanted—Refrigeration Machinery.)

Motor Cars, Garages, Tires, Etc.

Ala., Tuscaloosa—Garage—W. F. Fitts, Sr. let contract to M. L. Waddell to erect 50x120-ft. garage, brick construction; tar and gravel roofing; cement floor.

Fla., Haines City—Garage, etc.—Charles E. Randall will erect 40x60-ft. garage and service station, brick and metal construction.

Fla., Hastings—Repair Shop—Hastings Machine Co. organized as branch of Big Brick Garage Co. will establish general machine and repair shop; install machine tools, plumbers supplies; also represent mfrs. of farming implements, etc. (See Machinery Wanted—Plumbers Supplies, etc.; Farming Implements, etc.)

Fla., Jacksonville—Automobile Accessories—Griffith-Latimer Co., capital $10,000, incptd. with C. N. Griffin, Prest.; F. H. Parks, Secy.-Treas.

Fla., Jacksonville—Automobile Accessories—Medlin-Peacock Buick Co., incptd. with Joe E. Peacock, Prest.; J. Leon Medlin, Secy.-Treas.

Fla., Tampa — Automobile Accessories—Oakland Sales Co., capital $15,000, incptd. with E. W. Buchanan, Prest.; E. S. Hull, Secy.-Treas.

Fla., Tampa—Motors—G. and H. Motor Car Co., capital $50,000, incptd. with C. G. Gusrafson, Prest.; A. T. Stewart, V.-P.; and C. W. Hass, Secy.-Treas.

Ky., Ashland—Tubes—Kentucky Non-Deflating Tube Co., capital $25,000, incptd. by D. H. Hopkins, H. J. Carey and R J. Griffith

Ky., Hellier—Motors—W. D. Bartley Motor Co., capital $10,000, incptd. by E. L. Bailey, W. D. Bartley and R. E. Stephenson.

Ky., Louisville—Garage—Parkview Garage, incptd. by August and H. A. Ropke, J. D. Cooper.

Ky., Louisville—Motors—Atlas Motor Machine Co., capital $25,000, incptd. by W. A. Check, R. N. Gimmel and others.

Ky., Louisville—Motors—Cook & Kroeger Motor Co. incptd. by Grade F. Kroeger, John H. Cook, Jr., Vernon Dawkins.

Ky., Whitesburg—Letcher Buick Co., capital $10,000, incptd. by Toney Raniero, Coleman and Martin Venters, all Seco, Ky.

La., New Orleans—Repair Shop—C. H. Perrett will erect automobile repair shop and filling station.

Md., Baltimore—Automobile Accessories—Williamson Mfg. Co. John S. Williamson, Prest., York Rd. and Homeland Ave. plans enlarging plant, also moving to new location.

Md., Baltimore—Garage—Wm. J. Ogden, 405 Union Trust Bldg., let contract to H. M. Reinhart, 507 Calvert Bldg., to erect 1 story, $25,000 garage.

Tenn., Knoxville—Filling Station—Gulf Refining Co. will erect 6 pump capacity filling station; purchased site.

Tenn., Wartburg—Automobiles — Premo Automobile Co., capital $10,000, incptd. by C. C. Liles, James F. Morton and George G. Slaughter

Tex., Dallas — Automobiles — Dallas-Parts Service Co., 2105 Commerce St. incptd. by C. L. McNulty, W. A. Fosdick and W. F. Rose.

Tex., Dallas—Garage—Christy-Dolph Construction Co. awarded contract for construction of 66x88 ft. garage and service station, brick and steel; costing $16,000; J. Woerner & Co., Archt.

Tex., San Antonio—Garage, etc.—Army Garage & Auto Co. increased capital from $30,000 to $50,000.

Va., Richmond—Automobile Tops—Virginia Auto Top Co., capital $10,000, incptd. with H. Bryant, Prest.; R. E. Roach, Secy.

Va., Woodstock—Filling Station—Shenandoah Oil Co., Kneisley Bros., Woodstock, and J. F. Forsyth, Front Royal, Va., Proprs. have under construction distributing station, with gasoline and oil capacity of 40,000 gals.

W. Va., Beckley—Garage—Beckley Automobile Paint Shop Co. incpt. by C. O. Stahlman, T. J. Kroll and Jim H. Shott.

W. Va., Charlestown—Garage, etc.—Anderson Steam Vulcanizer Co., incptd. by G. A. Hinterleitner, E. H. Shonk and George H. Imboden.

W. Va., Clendenin—Automobiles—Clendenin Auto Co., capital $50,000, incptd. by H. E. and J. J. Bek, J. P. Lewis, Charleston, W. Va.

W. Va., Martinsburg—Garage—Berkley Garage Co. let contract to M. Cox, 606 W. King St. to erect 1 story 60x115-ft. public garage.

W. Va., Piedmont—Service Station—Piedmont Motor Service Co., capital $50,000, incptd. by William and Mary Middleton, Piedmont; Henry L. Best, Luke, Md.

W. Va., Spencer—Garage—Simons Woodyard Auto Co., S. A. Simons, Mgr. will erect 2 story and basement 50x130-ft. garage, brick and stone construction, wood floor and roof; R. M. Bates, Jr., Archt., First National Bank Bldg., Huntington, W. Va.

W. Va., St. Albans—Automobiles—St. Albans Auto Co., capital $50,000, incptd. by J. P. Lewis, R. R. and Tilman Green, Charleston, W. Va.

W. Va., Wheeling—Tires—Liberty Tire Co., 90 Market St., capital $25,000, incptd. by L. R. Crago, W. S. Burt and H. M. Allen.

Railways

Ark., Benton—Benton & Saline County Railroad Co., capital stock $75,000, chartered and will build about 3 mi. line immediately from Benton to beyond Glenville Park on Saline River. Directors: J. J. Ball, W. F. Cammack, John M. Davis, C. M. King and Austin Ball.

Ky., Somerset—Continential Rock Asphalt Co., it is reported, will build 1½ mile standard guage railroad with siding, at Big Clifty, Ky. W. A. White, president; J. E. Waddle, secretary-treasurer, both of Somerset.

La., Alexandria—Thomas Gravel Co. Contemplates building 6 mi. of railroad and switching tracks at Alexandria. I. L. Thomas, Mgr.; A. W. McMichaiel, Vice-Prest.; R. C. Baker, Secy-Treas.

N. C., Fayetteville—Cape Fear Railway, Incorporated, organized to build traction line, Fayetteville, west to Camp Bragg, and south to mill villages, on Massey Hill, altogether about 20 mi. of construction. Supersedes Cumberland Railway & Power Co. Application made for franchise. N. A. Sinclair, of Fayetteville, Prest.; L. H. Couch, Vice Prest.; A. C. Bradley, Secy. & Treas., both of Raleigh, N. C. Other directors are John R. Tolar, Jr., Frank H. Stedman and A. B. McMillan, of Fayetteville; and J. Kemp Johnson, of Raleigh. Executive committee: Messrs Tolar, Stedman and Couch.

Okla., Foraker—Construction contracts were let for the Osage Railway, from Foraker to Shidler, Okla., 10½ mi. as follows: Grading to R. L. Plunkett, of Pawhuska, Okla.; bridges, trestles and culverts, to J. A. Moore, of Foraker; Jas. P. Gallager of Foraker, is Ch. Engr. & Asst. Treas. of the company; E. S. Shidler, of Pawhuska, president; J. W. Keith, of Pawhuska, Auditor and Secy.

Road and Street Construction.

Ala., Anniston—City will construct 25,000 sq. yds. street paving; asphaltic concrete, bitulithic, brick or Tarvia penetration on reconstructed slag base or Portland cement concrete; 26,000 lin. ft. combined curb and gutter; etc.; bids until Jan. 3; Robert L. Totten, Consit. Engr., Birmingham, Ala. (See Machinery Wanted—Paving.)

Ala., Athens—City, S. A. Davis, Clk. will construct curb, gutter, paving and spread seal coat on certain waterbound macadam streets within districts described in Ordinances 33 and 34; 15,835 lin. ft. concrete curb and gutter; 50,700 sq. yds. bituminous seal coat; 2900 sq. yds. waterbound macadam with seal coat; etc.; bids until Dec. 30. (See Machinery Wanted—Paving.)

Ala., Florence—Alabama State Highway Comsn., Montgomery, Ala. approved project of building road from Florence to connect with Bee line highway from Nashville to Orlando.

Ala., Fort Payne—City let contract to Coker, Gamble & Brown, Chattanooga, Tenn. for constructing several miles sidewalk, curbs, gutters and sanitary sewers. (Lately noted inviting bids.)

Ala., Selma—City will let contract for paving North Broad St.; cost $50,000; W. O. Crisman, City Engr.

Ark., Morrillton—City let contract to Morena-Burkman Co., St. Louis, Mo., at $101,000 for paving streets; concrete base 6 in. thick and 2 in. asphalt top; concrete gutters and curbing.

Ark., Pine Bluff—City plans paving streets; 8 mi. concrete, asphalt and macadam pavement; cost $425,000; J. H. Guest, City Engr.

Ark., Searcy—City will pave streets. Address The Mayor.

Fla., Bushnell—City plans selling about $30,000 bonds to pave streets; asphalt. Address The Mayor.

Fla., DeLand—State Road Dept., Tallahassee, Fla. will construct 19.239 mi. compacted rock base or shell base on section of State Road No. 3 in Volusia County between south line of Putnam county and De Leon Springs; 191,960 sq. yds.; bids until Jan. 5; H. B. Phillips, Chrmn. Lately noted. (See Machinery Wanted—Road Construction.)

Fla., Fort Meade—City, Mayor Nat J. Patterson plans paving streets; contemplates issuing bonds.

Fla., Fort Meyers—Lee County proposes to issue $1,500,000 bonds for road construction. Address County Commrs.

Fla., Gainesville—State Road Dept., Tallahassee, Fla. will construct 12.602 mi. compacted rock base and bituminous macadam wearing surface on section of State Road No. 2 known as Federal Aid Project No. 33 in Alachua County between Burnetts Lake and Gainesville; alternate bids on cement concrete, sheet asphalt, rock asphalt, bituminous concrete and cement grouted brick; bids until Jan. 5; H. B. Phillips, Chrmn. (See Machinery Wanted—Road Construction.)

Fla., Jacksonville—City will construct 22,230 sq. yds. aspaltic concrete pavement on 6 in. concrete base; cost $113,988.85; bids until Dec. 29; W. E. Sheddan, Acting City Engr. (See Machinery Wanted—Paving.)

Fla., Lake Wales—City, M. R. Anderson, Mayor will pave streets; about $600,000; bids until Jan. 31; J. W. Turner, City Engr., Lakeland, Fla. Lately noted voting bonds. (See Machinery Wanted—Paving.)

Fla., Macclenny—State Road Dept., Tallahassee, Fla. will construct compacted rock base and bituminous macadam wearing surface on section of State Road No. 1 known as Federal Aid Projects No. 11, 21, 22 and 23 in Baker, Duval and Nassau counties; alternate bids on cement concrete, sheet asphalt, rock asphalt, bituminous concrete and cement grouted brick; length of projects, Project 11, 15.4 mi.; Project 21, 5.68 mi.; Project 22, 8.90 mi.; Project 23, 12.80 mi.; bids until Jan. 4; H. B. Philips, Chrmn. Lately noted. (See Machinery Wanted—Road Construction.)

Fla., Orlando—State Road Dept., Tallahassee, Fla. will construct 8.594 mi. compacted rock base and bituminous macadam wearing surface on section of State Road No. 2 known as Federal Aid Project No. 13 in Orange County between Plymouth and Mount Dora; bids until Jan. 5; H. E. Philips, Chrmn. (See Machinery Wanted—Road Construction.)

Fla., Palatka—City, Chas. Burt, Clk. will construct and set 20,000 lin. ft. concrete curb; lay 13,000 sq. yds. brick paving; bids until Jan. 10; Jno. H. Randolph, City Engr. (See Machinery Wanted—Paving.)

Fla., Palatka—State Road Dept., Tallahassee, Fla. will construct 12.791 mi. compacted rock or shell base and bituminous macadam wearing surface on section of State Road No. 3 known as Federal Aid Project No. 18 located in Putnam county between Sisco and North Line of Volusia County; alternate bids on cement concrete, sheet asphalt, rock asphalt, bituminous concrete and cement grouted brick; bids until Jan. 5; H. B. Phillips, Chrmn. Lately noted. (See Machinery Wanted—Road Construction.)

Fla., Pensacola—Escambia County will pave 80 mi. roads including grading, paving and building bridges; cost $2,000,000; $1,000,000 available 1922; Winston E. Wheat, County Engr. (Lately noted.)

Fla., Tampa—Hillsborough County contemplates issuing $3,000,000 bonds for constructing hard roads. Address County Commrs.

Fla., Wauchula—City plans voting on $70,000 bonds for paving streets. Address The Mayor.

Fla., West Palm Beach—City, Karl Riddle, Mgr. will improve boulevards and parks; bids Jan. 1, 1922; H. C. Fugate, Engr. (Lately noted to vote on bonds.)

Ky., Brandenburg—Ky. State Highway Comsn., Frankfort, Ky. will construct 2.7 mi. surfacing in Meade County, 16-ft. wide; waterbound macadam; cost $25,000; bids opened Dec. 21. Lately noted. (See Machinery Wanted—Road Construction.)

Ky., Catlettsburg—Ky. State Highway Comsn., Frankfort, Ky. will grade and drain 7.8 mi. Mayo Trail in Boyd County; cost $100,000; bids opened Dec. 21. Lately noted. (See Machinery Wanted—Road Construction.)

Ky., Greenup—Ky. State Highway Comsn., Frankfort, Ky. will construct 8.4 mi. 12x20-ft. pavements in Greenup and Boyd counties; cost $375,000; bids opened Dec. 21. Lately noted. (See Machinery Wanted—Road Construction.)

Ky., Lexington—Ky. State Highway Comsn., Frankfort, Ky. will construct 3.6 mi. road in Fayette County; 18-ft. rock asphalt; cost $100,000; bids opened Dec. 21. Lately noted. (See Machinery Wanted—Road Construction.)

Ky., Paducah—Ky. State Highway Comsn., Frankfort, Ky. will construct 2.5 mi. 18-ft. pavement out of Paducah; rock asphalt; penetration; reinforced concrete; cost $70,000; bids opened Dec. 21. Lately noted. (See Machinery Wanted—Road Construction.)

La., Oberlin—Allen Parish, A E. Darbonne, Clk. Police Jury will sell $60,000 bonds for road building.

La., Opelousas—City, Mayor E. L. Loeb let paving contracts as follows: Woodruff, Powers & Gilchrist, of Mississippi to pave streets and Alexandria Contracting Co. to pave sidewalks; will let other paving contracts in February; D. E. Durio, City Engr. (Lately noted inviting bids.)

La., Shreveport—Highway Dept. Board State Engrs., 332 Maison Blanche Annex, New Orleans, La. will construct 9.50 mi. Shreveport-Arkansas and 9.50 mi. Shreveport-Mansfield highways; Sections A and B; bids until Dec. 23. (See Machinery Wanted—Road Construction.)

Md., Baltimore—Paving Comsn. recommended letting contract to Baltimore Asphalt Block & Tile Co., 1320 N. Monroe St., at $32,100 for topping west side of Key Highway from Laurens St. to point south of Baltimore and Ohio bridge; sheet asphalt.

Miss., Laurel—City, G. L. Lightsey, Clk. will construct 24,392 sq. yds. brick pavement with concrete foundation; 7,674 lin. ft. concrete header; 4,564 lin. ft. concrete curb; bids until Dec. 30. (See Machinery Wanted—Paving.)

Miss., Mendenhall—Simpson County voted bonds for building link of highway near Saratoga. Address County Commrs.

Miss., Pascagoula—Jackson County plans expending $380,000 for repairing Jackson county link of Old Spanish Trail. Address County Commrs.

Miss., Winona—City, W. F. Blackston, Clk. will construct 14,081 sq. yds. monolithic concrete paving; 3200 ft. curb and gutter; bids until Jan. 3. (See Machinery Wanted—Paving.)

Miss., Yazoo City—Yazoo County Separate Road Dist. No. 5 will vote Dec. 29 on $25,000 road construction bonds. Address Supvrs.

Mo., Cassville—State Highway Dept., Jefferson City, Mo. plans improving highway in Barry County; will let contract.

N. C., Bakersville—North Carolina State Highway Comsn., Raleigh, N. C. let contract to Porter & Boyd, Charlotte, N. C., at $199,132 for Project 856 in Mitchell County between Spruce Pine and Ledger, involving 7.04 mi. penetration macadam road on Route No. 19; structures to, L. J. Chandler, Virgilina, Va., at $18,146. (Lately noted inviting bids.)

N. C., Charlotte—North Carolina State Highway Comsn., Raleigh, N. C. let contract to Speed-Parker Co., Louisville, Ky., at $51,088 for project 655 involving 1.57 mi. hard-surface road in Mecklenburg County east of Charlotte toward Monroe. (Lately noted.)

N. C., Edenton—North Carolina State Highway Comsn., Raleigh, N. C. will let road contracts as follows: Nello L. Teer, Durham, N. C., at $13,645 for Project 113, from Edenton north toward Gatesville on Route No. 32 involving 9.89 mi. grading without surfacing; Battershill & Goode, Virgilina, Va., at $15,767 for Project 113 from end of Project 113 Gates County line toward Gatesville on Route No. 32. Structures to, Chandler & Ragland, Virginlina, Va., at $25,200.35; both Chowan County. (Lately noted inviting bids.)

N. C., Franklin—North Carolina State Highway Comsn., Raleigh, N. C. let contract to E. A. Wilson Co., Knoxville, Tenn., at $284,070.30 for Project 980 involving 17.84 mi. waterbound macadam road in Macon-Swain Counties between Topton and Almond on Route No. 10; structures to, Southern Dray Co., Asheville, N. C., at $28,803.60. (Lately noted inviting bids.)

N. C., Gastonia—Gaston County let contract to Simmons Construction Co., Charlotte, N. C., at $40,000 for constructing 5 mi. hard-surface road.

N. C., Gastonia—Gaston County Commrs. will construct 55,000 sq. yds. additional asphaltic concrete paving; bids opened Dec. 20; D. L. Struthers, Engr.

N. C., Graham—Alamance County Highway Comsn. will construct 5.93 mi. Kimesville road; bids opened Dec. 17. Address W. L. Spoon, Burlington, N. C.

N. C., Hamlet—City plans hard-surfacing streets and installing sanitary sewers; cost about $80,000. Address The Mayor.

N. C., Hayesville—North Carolina State Highway Comsn., Raleigh, N. C. let contract to E. A. Wilson Co, Knoxville, Tenn., at $33,838.60 for Project 920 involving 5.01 mi. gravel road in Clay County between Hayesville and Georgia State Line on Route No. 109; structures to, W. T. Moore Concrete Products Co., Andrews, N. C., at $16,048.50. (Lately noted inviting bids.)

N. C., Hendersonville—North Carolina State Highway Comsn., Raleigh, N. C. let contract to Sam Davis Construction Co., Greensboro, N. C., at $26,312.50 for Project 833 in Henderson County involving 5.20 mi. gravel road between Horseshoe and Transylvania County line on Route No. 28; structures to, Asheville Construction Co., Asheville, N. C., at $8067.90. (Lately noted inviting bids.)

N. C., Hickory—S. S. Shuford will develop tract adjacent to new country club as suburban development including construction of roads, etc.; E. S. Draper, Landscape Archt. & City planner, 11 E. 5th St., Charlotte, N. C. (See Land Developments.)

N. C., Hillsboro—North Carolina State Highway Comsn., Raleigh, N. C. let contract to Crawford & Crawford, Mebane, N. C., at $17,442.70 for Project 456 in Orange County between Hillsboro and Alamance County line, involving 9.87 mi. soil road. (Lately noted.)

N. C., Monroe—North Carolina State Highway Comsn., Raleigh, N. C. let contract to Redmon Construction Co., Monroe, N. C., at $112,604.80 for Project 695 in Union County between end of Project 692 to Bakers Siding on Monroe-Chatloote road involving 4.51 mi. hard surface; Topeka pavement. (Lately noted inviting bids.)

N. C., Morganton—North Carolina State Highway Comsn., Raleigh, N. C. let contract to Southern Dray Co., Asheville, N. C., for Project 811 in Burke County between Morganton and Glen Alpine involving 5.24 mi. hard-surface road on Route No. 10; plain concrete pavement. (Lattly noted inviting bids.)

N. C., Scotland Neck—Town, Henry T. Clark, Clk. plans issuing $100,000 bonds for street improvements.

N. C., Shelby—North Carolina State Highway Comsn., N. C. let contract to Southern Paving Co., Chattanooga, Tenn., at $54,814 for Project 823 in Cleveland County between Shelby and Cleveland Springs involving 1.90 mi. hard-surface road on Route 206. (Lately noted inviting bids.)

N. C., Southern Pines—Town, Mayor Richardson plans issuing about $175,000 bonds for improving streets, sewer and water systems, etc.

N. C., Wentworth—Rockingham County Commrs. will sell $400,000 road and bridge construction bonds; Wade H. Gentry, Register of Deeds, Reidsville, N. C.

N. C., Wilkesboro—North Carolina State Highway Comsn., N. C. will construct 5.97 9-ft. hard-surface road from Wilkesboro to Millers Creek on Route No. 60; low bidder Porter & Boyd, Charlotte, N. C., at $11,349.80. (Lately noted inviting bids.)

N. C., Williamston—North Carolina State Highway Comsn., Raleigh, N. C. let contract to J. P. Dicus, Eurgaw, N. C., at $58,784.50 for Project 155 in Martin and Pitt counties on Route No. 90 from Williamston to Bethel involving 19.31 mi. grading and surfacing; structures to, P. R. Ashby, Raleigh, N. C., at $30,467. (Lately noted inviting bids.)

N. C., Wilson—North Carolina State Highway Comsn., Raleigh, N. C. let contract to P. R. Ashby, Raleigh, Raleigh, N. C., at $184,993.80 for Project 291, involving 7.63 mi. hard surface road in Wilson County on Route No. 40 between Wiggins Mill-south of Wilson to Wayne County line. (Lately noted inviting bids.)

Okla., Mangum—City Commrs. will pave Street Improvement Dist. No. 2 including portions of W. Pierce St., Maryland Ave. and Tyler St.; 11,640 sq. yds. asphaltic concrete on concrete base; bids until Dec. 28; John H. Tomme, City Mgr.; Benham & Mullergren, Consit. Engrs., Firestone Bldg., Kansas City, Mo. (See Machinery Wanted—Paving.)

Okla., McAlester—Pittsburg County will construct roads; voted $750,000 bonds. Address County Commrs. (Lately noted to vote.)

S. C., Florence—Mars Bluff Bridge Board let contract to Chitwood & Palmer, to construct concrete pavement, earth fill and approaches. Lately noted inviting bids. (See Road and Street Construction.)

S. C., Orangeburg—Orangeburg County will probably let contract to Friday & Hill for constructing 8.256 mi. Springfield-Neeses road, at $25,000. (Lately noted inviting bids.)

S. C., Walhalla—Oconee County Highway Comsn. let contract to Johnston Construction co., Westminster, S. C. to top-soil 5.7 mi. road; cost $25,000; J. N. Stribling, Engr. (See Machinery Wanted—Road Construction.)

Tenn., Elizabethton—Carter County plans constructing about 50 mi. road.; cost about $996,000; E. H. Little, Chrmn. County Court; W. T. Testerman, Secy. State Highway Comsn., Nashville, Tenn.

Tenn., Sevierville—City will pave Main, New, Prince, Bruce, Grace and other streets; voted $75,000 bonds. Address The Mayor. (Lately noted to vote.)

Tex., Alice—Jim Wells County contemplates voting on $600,000 bonds for road and bridge construction.

Tex., Beeville—Bee County has under construction concrete curb on 40.7 mi. Highway No. 9 across County on both sides of gravel bituminous pavement; $60,000 Federal Aid; T. M. Cox, County Judge; A. C. Pancoast, County Engr.

Tex., Cameron—Ch. Engr., U. S. Bureau Public Roads, Washington, D. C. approved plans for construction of Federal Aid Project No. 191-D covering 8.2 mi. 14-ft. gravel road on Highway No. 44, Milam County; cost about $57,000; W. G. Gillis, County Judge; A. F. Mitchell,, County Engr.

Tex., Dallas—Dallas County will grade and surface Coppell road; 46,000 cu. yds. gravel; 102,000 sq. yds bituminous topping; surface Preston road; 86,500 sq. yds. surfacing with native stone base and gravel and ⅝ in. bituminous topping; bids opened Dec. 19; Arch C. Allen, County Judge; Nagle, Witt-Rollins Engineering Co., Engr.

Tex., Fredericksburg—Gillespie County will construct State Aid Project No. 238 involving construction of 2.04 mi. gravel bituminous road on Highway No. 9 through town of Fredericksburg; 16,366.6 sq. yds. bituminous topping; bids opened Dec. 21; A. H. Kneese, County Judge; A. F. Moursand, County Engr. (See Machinery Wanted—Road Construction.)

Tex., Georgetown—Williamson County will grade and construct drainage structures on 3.5 mi. road from Coupland east; F. D. Love, County Judge; R. A. Nichols, County Engr.

Tex., George West—Live Oak County plans voting in January on bonds for road construction. Address County Commrs.

Tex., Kerrville—Kerr County will sell $163,500 Road Dist. No. 1 bonds for road construction; Lee Wallace, Judge.

Tex., Linden—Ch. Engr., U. S. Bureau Public Roads, Washington, D. C. approved revision of plans for construction of 7.7 mi. Highway No. 1 and 8 in Cass County calling for $7,296.50 additional Federal Aid; H. D. Nelson, County Judge; Hess & Skinner, County Engrs., S. W. Life Bldg., Dallas, Tex.

Tex., Paris—Ch. Engr., U S. Bureau Public Roads, Washington, D. C. approved plans for 4.6 mi. 16-ft. concrete road on Highway No. 5 in Lamar County; cost $164,000; W. L. Hutchinson, County Judge; W. M. Fooshee, County Engr.

Tex., Pittsburg—Camp County is preparing plans for construction of 17 mi. gravel road on Highway No. 1-A from Wood County to Titus county line; cost about $151,000; also 11 mi. Highway No. 11 from Upshur county line to Titus county; cost about $220,000; J. A. Efried, County Judge; Chas. C. Chappell, County Engr.

Tex., Port Lavaca—Calhoun County will surface 4.6 mi. Highway No. 29 from Port Lavaca to Wittnebert Gate; Federal Aid Project 99, Calhoun County; mud shell surfacing; bids opened; S. L. Marsh, County Judge; R. H. Phillips, County Engr.

Tex., Robstown—City will vote on about $80,000 bonds for paving and graveling 15 blocks and installing sewerage system and disposal plant. Address The Mayor. (Lately noted.)

Tex., Waxahachie—Ellis County plans to construct Midlothian-Dallas road; sold $65,000 bonds. Address L. O. Moore, County Commr.

Va., Harrisonburg—Rockingham County plans road improvements; Jos. G. Myers, County Treas.

Va., Portsmouth—Norfolk County Supvrs. will sell $259,000 road construction bonds; plans selling $250,000 additional bonds for constructing roads.

W. Va., Bluefield—State will let contract in February 1922 for construction of gap in road between Bluefield and Welch known as Simmons Mountain road; 7½ mi.; bituminous macadam, 16-ft. wide and 10-in. deep. Address Engr. Spillman.

W. Va., Lewisburg—Greenbrier County will grade, drain and pave 5 mi. Blue Sulphur Turnpike from Alderson toward Blue Sulphur Springs; 27,333 sq. yds. penetration macadam surface 3 in. deep; 25,200 sq. yds. base course 6 in. deep; 11,200 sq. yds. stone shoulders; bids until Jan. 3; J. W. Rader, county Engr. (See Machinery Wanted—Paving.)

Sewer Construction.

Ala., Bessemer—City will construct sanitary sewer system in 5th Ward, including Jonesboro; vote Jan. 16 on $50,000 bonds; B. C. Jones, Mayor. (Supersedes recent item.)

Ala., Fort Payne—City, Chas. Landstreet, Clk. let contract to Coker, Gamble and Brown, Chattanooga, Tenn., at $27,000 to construct sanitary sewers, pave sidewalks, etc. (Lately noted bids until Dec. 6.)

Ga., Albany—City will construct sewer system; issued bonds. Address The Mayor.

Ky., Dawson Springs—City, will extend sewer system; bids until Apr. 1, 1922; Wm. Lynch, Mayor. Lately noted voted bonds. (See Machinery Wanted—Sewers.)

N. C., Asheville—City plans constructing sanitary sewer from Old South bridge to Worley Hill; B. M. Lee, City Engr.

N. C., Flat Rock—Associate Reformed Presbyterian Assembly, E. C. Stuart, Prest., Tampa, Fla., will install sewer, water and lighting system in school building. (See Machinery Wanted—Septic Tanks.)

N. C., Hamlet—City plans expending $80,000 to install sanitary sewers, pave streets, etc. Address The Mayor.

N. C., Southern Pines—City, Mayor Richardson, will improve sewer and water systems; plans issuing $25,000 bonds; Gilbert White, Engr., Durham, N. C.

Okla., Tulsa—City, T. D. Evans, Mayor, will construct storm sewers in 11th St. and adjacent territory; invites bids; C. E. Griggs, City Engr. (Supersedes recent item.)

Okla., Watonga—City issued $20,000 sanitary sewer system bonds. Address The Mayor.

Tenn., Memphis—City, Rowlett Paine, Mayor, will construct sewers in Randolph subdivision; C. C. Pashby, Clk.

Tex., Gainesville—City purchased Oderless Sewerage Co's plant. Address The Mayor.

Tex., Groesbeck—City plans installing sewerage system. Address The Mayor.

Tex., Robstown—City plans installing sewerage system and disposal plant; pave streets; will vote on $80,000 bonds. Address The Mayor. (Lately noted.)

Va., Potomac—City, Jno. W. Varney, Mayor, will issue $60,000 sewer bonds.

W. Va., Holidays Cove—City let contract to Thoney Pietro Co., to install sewer system. Address The Mayor.

W. Va., Huntington—Board of Commrs, Mat Miser,, Commn. of Streets and Sewers, will construct sewer in Staunton St.; bids until Dec. 29; A. B. Maupin, City Engr. Lately noted. (See Machinery Wanted—Sewers.)

W. Va., Moundsville—City, L. L. Stidger, Clk., City Bldg., will install sanitary sewer system; S. Howe Bonar, Engr.

W. Va., Parkersburg—City contemplates installing storm sewers. Address The Mayor.

Telephone Systems.

Ga., Tybee—Navy Dept., Bureau of Yards and Docks, Washington, D. C. will construct wireless compass station; bids open; R. W. Walker, Chief Electrician, Naval Radio Station, 39th St. and Ogeechee Rd.

S. C., Denmark—American Telegraph & Telephone Co. let contract to erect 3 story exchange building, steel and concrete construction; estimated cost nearly $200,000.

Tex., Mexia—Humphreys Pure Oil Pipe Line Co., Wm. Paul Gage, Prest.-Gen. Mgr., 1006 Carter Bldg., Houston, Tex. will construct 200 to 225 mi. private telegraph and telephone lines in connection with pipe line development. (See Gas and Oil Enterprises.)

Tex., Waxahachie—Southwestern Bell Telephone Co. reported to expend between $50,000 and $75,000 on improvements and extensions.

Textile Mills.

Ga., Forsyth—Twine—Trio Mfg. Co., H. E. Newton, Secy.-Treas., plans increasing equipment from 3600 to 6000 spindles; install additional machinery.

Ga., Glovers, P. O. Juliette—Juliette Milling Co., J. N Birch, Secy.-Treas., 413 Broadway, Macon, Ga., is erecting plant addition; install machinery

Ga., Jackson—Towels, Crashes, etc.—Pepperton Cotton Mills, F. S. Etheridge, Secy., is installing 100 40-in. Draper looms with dobby attachments.

Md., Baltimore—Cotton, silk, etc.—Chesapeake Weaving Mills, Calvert Bldg., capital $150,000, incptd. by Jos. P. Murray, Frank S. Muzzey and F. Stanley Saurman.

Md., Elkton—Upholstering Fabrics—Elkton Tapestry Corp., capital $15,000, incptd. by Wm. W. Johnston, Henry Carr and Curtis Jones.

Okla., Muskogee—Woolens—J. E. Hillams interested in establishing woolen mill. (See Machinery Wanted—Woolen Mill Machinery.)

S. C., Landrum—Cotton Damask—Shamrock Damask Mills, J. R. Mallory, Treas., plans increasing capital to $50,000.

S. C., St. Matthews—Twine, etc.—Calhoun Twine Mill, capital $50,000, incptd. with W. S. Smoke, Prest.; A. K. Smoke, Vice-Prest., Secy. and Treas.

Tenn., Chattanooga — Yarns — Standard Processing Co., Thatcher Spinning Co.; both Chattanooga; Coosa Mfg. Co., Piedmont, Ala.; plans consolidating to incorporate with $5,000,000 capital; Standard Processing Co. increases capital from $400,000 to $1,122,000.

Tex., Post—Yarn—Cap Rock Mills, proposed capital $2,500,000, Mayor O. L. Weakley, interested, plans erecting mill construction building; will install 30,000 spindles; $750,000 machinery; bids until Aug. 1, 1922; electric power; daily output 10,000 lbs.; J. E. Sirrine, Archt-Engr., Greenville, S. C. (Lately noted Mayor O. L. Weakley, Herbert Jones, etc., interested in establishing $2,500,000 textile mill.)

Water Works.

Ark., Hardy—A. Sebert, Tuscumbia, Ala., applied for franchise to install water-works and electric lights.

Fla., Sebring—City will purchase water-works; will issue $100,000 bonds. Address The Mayor.

Fla., Williston—City will install water and lighting plant; vote Dec. 28 on $35,000 bonds. Address The Mayor.

Md., Cumberland—City, M. R. Hast, Clk., let contract to Vang Constructon Co., Liberty Trust Bldg., to erect 1-story 20x30 ft. pumping station; R. L. Rizer, City Engr.

N. C., Flat Rock—Associate Reformed Presbyterian Assembly, E. C. Stuart, Prest., Tampa, Fla., will install water, sewer and lighting system in school building. (See Machinery Wanted—Tank; Mains; Pipe.)

N. C., Southern Pines—City, Mayor Richardson, will improve water and sewer systems; plans issuing $25,000 bonds; Gilbert White, Engr., Durham, N. C.

N. C., Warsaw—City plans improving water and electric lighting systems; will issue $25,000 bonds. Address The Mayor.

Okla., Mill Creek—City will install water-works; voted $50,000 bonds. Address The Mayor.

Tenn., Chattanooga—City Water Co., M. F. Riley, Prest., will improve water-works; extend mains; improve pumping station, etc.; approximate cost $100,000.

Tex., Corpus Christi—Nueces County water Improvement Dist. No. 3 will improve water-works and irrigation; voted $300,000 bonds.

Tex., Newcastle—City, E. L. Gibson, Secy., let contract to Groves & Young, to construct 90-ft. concrete spillway for dam; city will construct filtration plant; Henry Exall Elrod Co., Engr., Dallas, Tex. Lately noted bids opened. (See Machinery Wanted—Filter Pipe and Fittings; Fire Plugs.)

Va., Charlottesville—City plans expending about $130,000 to construct filtration plant on Observatory Mountain; invites bids; and expend $370,000 to install Moorman's River water-works; Williamson, Carroll & Saunders, Engrs. Address The Mayor. (Previously noted contemplated.)

Va., South Boston—City, Jas. B. Wilborn, Mayor, will expend about $50,000 to extend water mains; R. R. Hamilton, Archt., Box 64; E. R. Farmer, Engr. (Supersedes recent item.)

Va., Staunton—City let contract to De Laval Steam Turbine Co., Trenton, N. J., at $3600 for pump for water-works. Address The Mayor.

W. Va., Huntington—Huntington Water Co., plans expending $375,000 to improve water-works; install pump at 24th St. station; increases capacity to 5,000,000 gals.; 2 filters, increasing filtration capacity 25 per cent; concrete sedimentation basin; 12 to 16-in. main from pumping station to reservoir.

Woodworking Plants.

Fla., Little River — Wicker Furniture—Smith-Evans Mfg. Co., New York reported to establish plant for mfre. of wicker furniture.

Fla., Pensacola—Wooden Blocks—Southern Paving Co. reported to improve plant, costing about $40,000; install 2 tanks for creosoting wood paving blocks.

Ky., Hazard—Furniture—Shepard & Combs Furniture Co., capital $8000, incptd. by D. R. Shepard, A. M. Combs and W. L. Campbell.

Ky., Louisville—Furniture—Palm Craft, capital $125,000, incptd. by Virgil G. Collis, Fred Reese and E. Sayre Courtney.

Ky., Louisville—United Casket Co., 3022 W. Chestnut St. reported to erect 1 story 100x450-ft. dry kiln plant and 1 story 40x40-ft. boiler room; M. Sartoro, Archt. and Engr., Cleveland, Ohio.

Md., Baltimore—Furniture—M. L. Himmel & Sons will occupy 119.9x46.9-ft. 1 and 2 story building; estimated cost $15,000; Otto G. Simonson, Archt., Maryland Casualty Tower Bldg.; John F. Kunkle, Builder, 29 S. Linwood St.

S. C., Clover—Furniture—Clover Furniture Co., incptd. with C. N. Alexander, Prest.; C. Q. Dufford, Secy.-Treas.

S. C., Conway—Mill Work, etc.—W. H. Winborne Co., W. H. Winborne, Prest. will erect 80x104-ft. 2 story plant; wooden structure with composition roof; mfre. flooring, ceiling, moulding, windows, doors, stairwork, etc. (Lately noted.)

Tenn., Chattanooga—Coffins—Chattanooga Coffin & Casket Co., E. H. Graves, increase capital from $100,000 to $200,000.

Tenn., Chattanooga—Coffins — Tennessee Coffin & Casket Co., P. W. Betterton, plans increasing capital from $100,000 to $200,000.

Tex., Beaumont—Furniture—Riggs Furniture Co., capital $30,000, incptd. by D. D. Fitch, T. C. and C. A. Riggs.

Fire Damage.

Ala., Birmingham—Charles R. Reid Lumber Co.'s plant at 36th. and 11th. Ave.; loss $60,000.

Ala., Goodwater—C. T. Smith, E. L. Crew & Co., Whitehead Drug Co., Motors Supply Co., Mrs. J. M. McDougal and Arnold & Woody's buildings.

Ark., Monticello—E. D. McCollough's residence; loss 20,000.

Ark., Pine Bluff—City livery barns on E. Barraque St.; loss $10,000; H. Hart, Street Commr.

Ark., Texarkana—Fouke Grain Co.'s elevator plant; loss $80,000.

Ark., Van Buren—Seaman-Packard Grocery Co.'s building on Main St.

Ga., Fort Gaines—Chattahoochee Canning Factory; Geo. Irwin's peanut warehouse and other structures; loss $6000.

Ga., Glenn—Bradley Davis and P. C. Whitley's stores.

Ga., Harlem—Hatcher Bros.' building.

Ga., Kite—C. H. Moore's cotton warehouse.

Ga., Statesboro—Sam Moore's residence and store 3 mi. from Statesboro.

Ga., Tignall—S. H. Rhodes' store.

Ky., Latonia, Sta., Covington—The Cedars, south of Latonia; loss $25,000. Address The Proprietor.

Ky., Lyndon—Kentucky Military Institute.

La., New Orleans—Building at 414 Carondelet St. occupied by Commercial Stationary Co. and Mack Trunk Co.

Md., Baltimore—James H. Preston's residence at 820 N. Charles St.; loss $25,000.

Miss., Gulfport—King's Daughters Infirmary on W. Beach St.

Miss., Jackson—Perfection Mattress Co.'s plant at Dottoville; loss $30,000; building owned by Jackson Casket & Mfg. Co.

Mo., Pocahontas—Pocahontas Creamery; owned by Alfred M. Vogel; loss $3500.

Mo., St. Louis—Thurner Furniture Co.'s 3 story brick building; loss $20,000.

S. C., Johnsonville—R. B. Huggins' garage; E. F. Prosser and W. Poston's buildings.

S. C., Latta—B. F. Moore & Co.'s building; S. E. Brunson's store; H. E. Parham's warehouse and other buildings; loss about $30,000.

S. C., York—Miller School 3 miles west of York; also Miller School in Bethel township. Address Board of Education.

Tenn., Johnson City—L. J. Ambrister Stave Co.'s drying sheds; loss $10,000.

Tenn., Rutledge—Baptist Church (address The Pastor) and Clyde Smith's residence.

Tex., Dallas—Consolidated Film & Supply Co.'s warerooms, also distribution agencies of Parker Film Co., Emergency Film Co., Texas Film Co., Enterprise Distributing Corp., United Artist, Peacock Production, Consolidated Film & Supply Co., Southern Enterprise Co., Metro Pictures, and Fox Film; total loss $1,000,000.

Tex., Dallas—Knepfly Building owned by Robt. McCart, Fort Worth; occupied by J. Rosenberg.

Tex., Georgetown—Mrs. Alex Eanes and A. P. Johnson's residences; loss $20,000.

Tex., Moulton—Henry Koestner and Henry Ettlinger's 3 buildings; loss $35,000.

Tex., Port Arthur—Tex. Co.'s refinery; main office Texas Bldg., Houston, Tex.

Tex., Waco—J. H. Bird's residence at 2221 S. Third St.

Tex., Waxahachie—Southern Curing Co.'s building; Fleming & Bruce's restaurant.

Va., Birds Nest—M. L. Hopkins' garage and A. J. Nottingham's store; loss $6000.

Va., Charlottesville—G. Norris Watson's residence; loss $9000.

Va., Norfolk—Lawrence A. William's residence on Western Branch; loss $20,000.

Va., Woodstock—Valley Light & Power Co.'s plant on Shenandoah River; loss $5000.

BUILDING NEWS

BUILDINGS PROPOSED

Apartment-Houses.

Ark., Little Rock—E. M. Pemberton will erect $12,000 apartment house at 315 State St.; 24 rooms; 3 stories.

Md., Baltimore—Herbert C. Forrester, 224 St. Paul St., will erect 3-story apartment house on Winsdor Ave., east of Harford Rd.; 3 stories; concrete and brick; cost $23,000.

Md., Baltimore—Israel Silberstein, Equitable Bldg., will erect building at 500 Park Ave.; 3 stories; 44x95.7 ft.; brick; cost $25,000: Edwin H. Browne, Archt.; construction by owner.

Mo., St. Louis—Chas. D. Raithel will erect apartment house at Shenandoah Ave., between Klemm and Thurman Aves.

Mo., St. Louis—H. A. Wagner, 6470 Plymouth St., will erect 2 apartment houses; cost $10,000 each; 2 stories; 34x37 ft.; plans by owner.

Tenn., Knoxville—Clinch-Locust Co., $150,000 capital, was incptd. by A. P. Brown, Cleveland, O.; C. L. Dooley, C. A. Gillespie and others; will erect apartment house at

Tenn., Memphis—F. H. Smith, 20-22 Linden Ave, will erect duplex apartment house; 2 stories and basement; 38x60 ft.; brick veneer; Chas. Deas, Archt., Goodwyn Institute.

Clinch Ave. and Locust St.; 5 stories; brick; 40 suites; Barber & Murray, Archts.

Tenn., Knoxville—Earl Worsham and associates will erect $225,000 apartment house at Cumberland Ave. and 8th St., West Knoxville; concrete and steel; buff tapestry brick laid in chocolate colored cement and mortar; terra cotta trim; hardwood interior; tiled bath rooms; steel window frames; 2 electric elevators; vapor heat; garage in basement; site, 85x125 ft.

Tenn., Knoxville—W. J. and Ralph Oliver and associates plan to erect $325,000 apartment house on W. Cumberland Ave., nr. S. 7th St.

Tenn., Memphis—Arnold Bros. & Stubbe will erect $150,000 apartment house; 18 suites; mat brick and stone; Mann & Gatling, Archts., Madison Ave. bldg.

Tenn., Memphis—R. B. Clinton, Clinton Bldg. Co., will erect $15,000 apartment house at 171 N. Willett St.; stone.

Tenn., Memphis—L. Donigan will erect $18,000 duplex apartment house on N. Evergreen St. nr. Poplar Ave.; brick veneer; 2 heating plants; S. J. Weigel, Archt.

Tex., Austin—J. B. Pope will erect $10,000 apartment house at 103-13 W. 10th St.; brick and hollow tile.

Tex., Houston—T. H. Gauthrie will erect $20,000 apartment house on Truxillo Ave.; 24 rooms.

Tex., Houston—Mrs. W. W. Watkins will erect $30,000 apartment house on Rosalie Ave.; 2 stories.

W. Va., Martinsburg—Dr. G. P. Morison will remodel and erect addition to building at King St. and Maple Ave.; offices on first floor; apartments above.

Association and Fraternal.

La., Monroe—Lodge No. 454, B. P. O. Elks will erect building on S. Grand St.

Mo., Monett—Masonic Building Assn. will erect temple; cost $35,000 to $40,000; 88.6x 46.6 ft.; brick and stone; Barrett specification roof; concrete and hardwood floors; ventilators; steam vacuum heat; electric lights; Heckenlively & Mark, Archts., Springfield; bids opened Dec. 29. (Lately noted.)

N. C., Greensboro—Masonic Order, B. McKenzie, Chrmn. plans committee, will erect $250,000 temple on E. Market St.; 60x110 ft. and 80 ft. high; 3 stories and basement; 2 stores and lobby on first floor; 2 lodge rooms, 40x60 ft. and 30x46 ft. on second floor; cloak room, retiring room and auditorium, 45x76 ft., with 20 ft. stage on third floor; elevator; pipe organ; Chas. C. Hartman, Archt. (Previously noted.)

Okla., Ardmore—Salvation Army will erect $20,000 building; 2 stories and basement.

Okla., Comanche—Masonic Lodge will erect building; G. S. Glenn, Archt., Walters. (See Machinery Wanted—Brick; Metal Ceilings.)

Okla., Holdenville—Order of Odd Fellows purchased site and will erect 2-story building; first floor for business purposes; second, lodge rooms.

Tenn., Johnson City—Lodge No. 486, Blue Lodge and Thos. Matson Chapter, A. F. & A. M. will erect $40,000 temple on E. Main St.; 2 stories; Geo. T. Wafford and others, Committee.

Tex., Kingsville—Ernest L. Anderson Post, No. 99, American Legion, will erect building; concrete, tile or brick; hardwood floors; metal ceilings. Address Jas. O. Walton. (Lately noted)

Bank and Office.

N. C., Asheville—Central Bank and Trust Co., Wallace B. Davis, Prest., is considering installing 1000 additional safe deposit boxes.

S. C., Greenville—American Natl. Bank will erect store and office building at Pendleton and Augusta Sts.; steel frame, brick and terra cotta; plate glass and copper; Martin & Ward, Archts.; bids opened. (Previously noted.)

Tex., Houston—Jas. G. Cafcalas and R. A. Burge will erect $250,000 building at Capitol Ave. and Fannin St.; 125x72 ft.; 6 or 9 stories; public market place on first floor; offices above; Finger & Cato, Archts.

Churches.

Ala., Samson—Baptist Church will erect brick veneer building; Rev. Mr. Patterson, Pastor of Baptist Church, Florala, will supervise construction.

Ark., Pine Bluff—Christian Church, A. W. Sweatt, Chrmn. Bldg. Comm., will erect $60,000 building at 6th Ave. and Laurel St.; 60x100 ft.; seating capacity 600; Mitchell Selligman, Archt.

Fla., Pensacola—Temple Beth-El, Rev. Mr. Freund, Rabbi, will erect $50,000 building.

Miss., Biloxi—First Baptist Church, Rev. J. L. Boyd, Pastor, 537 E. Howard Ave., will erect $35,000 building; 70x100 ft.; brick; hollow fireproof tile; metal ceilings; hardwood and concrete floors; plaster board; rolling partitions; ventilators; architect not selected; contract will probably be let in spring. Address J. C. Brent. (Lately noted.)

Miss., Greenwood—Baptist Church will expend $30,000 to enlarge building; C. W. Bulger, Archt., Dallas, Tex.

N. C., Kernersville—Methodist Episcopal Church, Rev. E. O. Cole, Pastor, plans to erect $30,000 building; M. Vance Fulp, Gideon Ring and Dr. J. R. Paddison, Bldg. Comm.

Okla., Avant—First M. E. Church, Rev. F. L. Einsel, Pastor, will erect $18,000 building; 1 story and basement; 50x60 ft.; C. P. Butler, Archt., 803 Kennedy Bldg., Tulsa; owner builds by day work.

Okla., Bristow—Presbyterian Church, Rev. T. Murray, Pastor, will erect $50,000 building; 2 stories and basement; brick; stone trim; C. P. Butler, Archt., 803 Kennedy Bldg., Tulsa; owner builds by day work. (Prevously noted.)

Okla., Norman — Methodist Episcopal Church, Rev. Mr. Mead, Pastor, will erect $80,000 building; 2 stories and basement; 70x116 ft.; brick; stone trim; Monnott & Reid, Archts., Empire Bldg., Oklahoma City. (Lately noted.)

Tex., Fort Worth—Mulkey Memorial Methodist Church, Rev. C. Q. Smith, Pastor, will erect Sunday school building at Ireland St. and Galveston Ave.; R. E. Foster, W. J. Baker and others, Bldg. Comm.

Tex., Houston — North Side Methodist Church will erect $102,000 building; 2 stories and basement; swimming pool, reading rooms, banquet hall and primary department of Sunday school in basement; auditorium to seat 1200, pastor's study, reception rooms, class rooms, etc. on first floor; Sunday school department and league rooms on second floor; Alfred C. Finn, Archt.

Tex., Sinton—Methodist Church plans to erect $25,000 building. Address The Pastor.

Tex., Taylor—First Baptist Church will erect $75,000 building; 130x90 ft.; brick; concrete basement; metal ceilings; rolling partitions; concrete floors; steel sash and trim; Will A. Arbuckle, Archt. (Lately noted.)

Va., Norfolk—Cumberland Street M. E. Church plans to erect building. Address The Pastor.

W. Va., Lowsville—Catholic Congregation will erect building; Rev. Peter Flynn, Morgantown, interested.

City and County.

Ala., Mobile—City Hall—City, Geo. E. Crawford, Mayor, plans to remodel and enlarge city hall for central fire station, police headquarters, and city auditorium; contemplates voting bonds.

Fla., Kissimmee—Municipal Building—City plans to erect building for city hall and fire station. Address The Mayor.

Fla., Orlando—City Hall—City plans to erect $200,000 city hall. Address The Mayor.

Ga., Tifton—Experiment Station—City and Tifton County will erect administration building for Coastal Plain Experiment Station, S. H. Starr, Director; 42x106 ft.; 2 stories and basement; brick.

Md., Baltimore—Men's Quarters—Board of Awards, Mayor Wm. F. Broening, Prest., will receive bids until Dec. 28 at office of Richard Gwinn, City Register, City Hall, to erect men's quarters for engine companies Nos. 48 and 49; drawings and specifications at office of J. F. Crowther, Inspector of Buildings, City Hall.

Md., Baltimore—Police Station—Board of Awards, Mayor Wm. F. Broening, Prest., will receive bids until Dec. 28 at office of Richard Gwinn, City Register, City Hall, to erect subpolice station at Washington Rd. and 11th St.; drawings and specifications at office of J. F. Crowther, Inspector of Buildings, City Hall.

Miss., Hattiesburg—City Hall—City, T. E. Batson, Mayor, will erect $100,000 city hall; 57x124 ft.; brick, stone and cement; composition roof; wood and tile floors; elevators; R. E. Lee, Archt.; bids opened Dec. 22. Address E. W. Estes, City Clk. (Lately noted)

Mo., Cape Girardeau—Alms House—Cape Girardeau County will erect alms house between Cape Girardeau and Jackson; cost $35,000; 70x102 ft.; brick and hollow tile; tile roof; pine and tile floors; vapor heat; lighting under consideration; A. F. Lindsay, Archt., Sikeston; bids opened in February. Address Blucher Sperling, Co. Clk., Jackson. (Lately noted.)

N. C., High Point—Municipal Building—City will issue $250,000 bonds to erect municipal building. Address The Mayor.

Tex., Manchester—Wharf Shed—City will erect $25,000 wharf shed; 480x180 ft.; steel framed ironclad; plans by City Engr. McVea.

Courthouses.

Mo., Union—Franklin County, F. A Ruger, Clk., will erect $15,000 courthouse and jail; 3 stories; 90x90 ft.; reinforced concrete, brick and stone; N. B. Howard, Archt., Arcade Bldg. St. Louis. (Lately noted.)

N. C., Carthage—Moore County Commrs., H. P. McPherson, Chrmn., will erect $150,000 courthouse (Previously noted.)

Dwellings.

Ala., Selma—Wm. Tanquery is erecting 2 dwellings on Montgomery Rd. and considering erecting 2 more dwellings later.

Fla., Lakeland—Thos. Wiske will erect 12 dwellings at Lincoln Ave. and North St.; 4 rooms and sleeping porch; plans to erect store building; also bungalow for own use.

Fla., Miami—Geo. E. Merrick is promoting development of 1600 acres known as Coral Gables; plans to expend $250,000 to erect bungalows of Spanish type; coral rock Span-

ish tile roof; oak and Florida pine floors; H. Geo. Fink, Archt.

Fla., New Smyrna—A. D. Munger will erect 15 bungalows at Canal and Cypress Sts.; also considering erecting hotel.

Fla., West Palm Beach—Stiles C. Hall will erect 4 dwellings; frame and stucco; slate surface roof; wood and tile floors; interior tile; plans and constructon by owner. (Lately noted.)

Ga., Atlanta—W. W. Causey will erect $10,000 residence at 129 Briarcliff Rd.; 2 stories; brick veneer.

Ky., Ashland—W. F. Sparks, W. Greenup Ave., is erecting residence in Prospect Pl.; brick.

La., Bonita—Bonita Lumber Co. will erect number of Cottages and develop town.

La., New Orleans—J. C. Lawrence, Alexandria, will erect residence at Napoleon Ave. and Freret St.

La., New Orleans—J. F. Kirn will erect $15,000 bungalow at S. Murat and Cleveland Sts.; construction by owner.

Md., Baltimore—Builders Trade Assn., Inc., 2 E. Lexington St., will erect 15 two-story brick dwellings at Singer and Beaufort Aves.; 19x30 ft.; Carey roofs; furnace heat; cost $40,000; Jos. R. Degges, Archt.; construction by owner. (Lately noted.)

Md., Baltimore—Edw. J. McGraw, 2304 Mt. Royal Ter., will erect 6 two-story brick dwellings and 2 garages at Park Ave. and Whitelock St.; cost $18,000.

Md., Baltimore—Jas. B. Yeatman, 4742 Park Heights Ave., will erect 9 two-story brick dwellings on Pall Mall Ave., nr. Wylie Ave.; 17.10x30 ft.; cost $20,000; Stanislaus Russell, Archt., 11 E. Lexington St.

Md., Baltimore—J. Irving Bealmer, Fidelity Bldg., will erect 5 two-story dwellings at 2901-9 Winchester St.; 14x48 ft.; cost $10,000.

Md., Baltimore—Maurice E. Green, Liberty Heights and Calloway Aves., will erect 2-story brick dwellings at 3613 Liberty Heights Ave.; 40x26 ft.; cost $10,000.

Md., Baltimore—Frank O. Singer, Jr., Equitable Bldg., will erect 2 dwellings at 4014-16 Bateman Ave.; 2 stories; frame; 28x42 ft.; slate roof; cost $10,000; W. B. Gerwig, Archt., Equitable Bldg.; construction by owner. (Lately noted.)

Miss., Corinth—Myra Hazard will erect $20,000 residence; 3 stories; frame; Mann & Gatling, Archts., Scimitar Bldg., Memphis, Tenn.

Miss., Grenada—Mann & Gatling, 616 Scimitar Bldg., Memphis, Tenn., prepared plans for $7000 residence for B. C. Adams; $6500 residence for S. S. Roane and $6500 residence for Dr. T. T. Hill; 1 story and basement; brick veneer; asphalt shingle roof; hardwood floors; hot water heat; electric lights; bids opened Dec. 22.

Miss., Hazlehurst—Dr. E. E. Burke plans to erect residence.

Mo., Cape Girardeau—A. J. Cook will erect brick residence.

Mo., Kansas City—Geo. W. Byers will erect $50,000 residence at 1000 W. 58th St.; hollow tile and stucco; English type; Edw. W. Tanner, Archt.

Mo., Kansas City—O. F. Roberts will erect 3 dwellings at 6419 Pennsylvania Ave. and 4026, 34 Flora Ave.; cost $10,000.

N. C., Charlotte—H. C. Sherrill Co. will erect number of cottages and double apartment house on Pecan Ave. and E. 8th and 9th Sts.

N. C., Charlotte—Myers Park Homes Co. is erecting 44 dwellings and plans to erect as many next year.

S. C., Charleston—Theodore Simmons, Jr., will erect $13,370 residence on Lenwood Ave.; brick veneer.

Tenn., Memphis—Czanne & McKnight, Scimitar Bldg., plan to erect 3 dwellings; 1 story; frame; plans by owner.

Tenn., Memphis—Everett D. Lee will erect stucco and frame residence; 1 story and basement; 38x54 ft.; S. J. Weigel, Archt., 307 Central Bank Bldg.

Tenn., Memphis—Jno. W. Faton, 1382 Court Ave., will erect residence; 2 stories and basement; brick veneer; B T. McGeen, Archt., 1382 Court Ave.

Tenn., Memphis—J. D. H. Meyer, 195 S. Somerville Ave., will erect residence; 2 stories and basement; 37x64 ft.; brick veneer; Chas Deas, Archt., 506 Goodwyn Institute.

Tenn., Memphis—J. W. Eaton will erect 1 eight-room dwelling and 2 five-room dwellings; cost $12,000.

Tex., San Antonio—Seeligsos & Wood will erect 6 dwellings on McCullough Ave.; 4 rooms; cost $13,400.

Tex., Stamford—First Baptist Church will erect erect parsonage. Address The Pastor.

Government and State.

Tenn., Greenfield—Post Office—L. C. Brasfield and J. N. Ray will rebuild burned postoffice building.

Hospitals, Sanitariums, Etc.

Ala., Florence—W. M. Canardy plans to erect sanatarium nr. Florence.

Ala., Montgomery — Anti-Tuberculosis League will erect fresh air camp; 14 units; 5 for 8 patients, 4 for 4 patients, and remainder for 1 patient each; Fredk. Ausfeld, Archt.

Fla., Dunedin—Dr. M. W. Pressley, Tampa, will erect sanitarium; 3 stories; brick and stucco; cost $60,000; offices, dining room and lobby on first floor; 26 private rooms with bath; Geo. Feltham, Archt., St. Petersburg.

Ga., Augusta—Treasury Dept., Jas. A. Wetmore, Arcting Suprvg. Archt., Washington, D. C., will expend $500,000 to improve Public Health Hospital No. 62 at Lenwood; erect 7 brick and concrete buildings; 5 to contain 60 beds each; 1 for central heating plant and 1 for kitchen and dining room to seat 300.

Ky., Louisville—Baptist State Board of Missions, M. B. Hunt, Chrmn., 824 Cecil Ave., will erect hospital on Barrett Ave.; 3 or 5 stories; 100x150 ft.; Joseph & Joseph, Archts., Francis Bldg.

Ky., Paducah—McCracken County, Wynn Tully, Commr. of Public Finance, voted $60,000 bonds to improve Riverside Hospital. (Previously noted.)

La., Baton Rouge—Franciscan Sisters, Eugene Cazedessus, Chrmn. Comm., will erect $200,000 hospital; 225x93 ft.; H shape; 4 stories; 125 beds; sun parlors on each floor; concrete and steel; W. T. Nolan, Archt., New Orleans. (Lately noted.)

Mo., St. Louis—McLain Sanatarium, Dr. L. C. McLain, Prest., plans to erect building at Geyer Rd. and Rose Hill Ave., Kirkwood; accomodate 250 patients.

N. C., Winston-Salem—City will improve and erect additions to city hospital; Chas. Barton Keene, Archt., 1218 Chestnut St., Philadelphia, Pa. (Previously noted to vote on $50,000 bonds.)

Okla., Oklahoma City—Oklahoma County, Ed. S. Butterfield, Chrmn. Board of County Commrs., will erect $200,000 tuberculosis hospital. (Lately noted to vote bonds.)

Tenn., Knoxville—Knoxville General Hospital will erect overpass between its building and Lincoln Memorial Hospital; cost $10,000 to $12,000; 129 ft. long; 11 ft. wide; steel, wood and stucco; enclosed in glass; A. B. Baumann, Archt.

Tenn., Nashville—City Hospital Comsn., Dr. W. C. Dixon, Secy., will erect nurses home at hospital; accomodate 45; Asmus & Clark, Archts. (Lately noted to issue $41,000 bonds.)

Tenn., Nashville—Protestant Hospital will erect $100,000 wing; 3 stories; 36 rooms. Address The Superintendent.

Tex., Dallas—Board of Commissioners, M. G. James, City Secy., will erect three 3-story units for Parkland Hospital; fireproof; reinforced concrete; Herbert M. Greene Co., Archt.

Hotels.

Ark., Benton County—Page Milling & Smelting Co., Fort Smith, will erect 36-room hotel in connection with development of mining town.

Fla., Miami—W. H. Ebsary will erect additional story to 3-story structure under construction at First Ave. north of Second St.; 60 guest rooms; ground floor for offices.

Ky., Bowling Green—H. L. Underwood is considering erecting hotel in connection with resort, Lost River Cave, 5 mi. from Bowling Green.

Mo., Westport, Sta. Kansas City—Elmer Williams will erect hotel at Westport Ave. and Main St.

Va., Staunton—A. T. Moore, Virginia Hotel, is promoting plans to erect $500,000 hotel at E. Main and Market Sts.

W. Va., Clarksburg—Dr. W. P. Goff and Col. Guy D. Goff will erect 2-story addition to Waldo Hotel; 126 rooms with bath, roof garden with double glass dome roof to accomodate 150 couples; hotel ball room, 54x42 ft., and private ball room, 47x38 ft.; fireproof; additional elevator service; Holmboe & Pogue, Archts.

Miscellaneous.

Fla., Fort Pierce—Clubhouse—Fort Pierce Woman's Club will erect building; 1 story; about 50x150 ft.; auditorium 47x100 ft.

N. C., Durham—Community House—First Presbyterian Church, Rev. D. H. Scanlon, Pastor, will erect $50,000 community house; 50x150 ft.; 2 stories; tapestry brick; slate roof; hardwood floors; safes; vaults; rolling partitions; mail chutes; steam heat; electric lights; will let contract Feb. 1; desires to procure architect and contractor. (Lately noted.)

N. C., Winston-Salem—Forsyth Country Club plans improvements; engaged Donald J. Ross, (I. Kennedy, Secy., Pinehurst) to lay out golf course.

Okla., Muskogee—Orphanage—Morrow Indian Orphanage, Victor M. Locke, Jr., Supt., will erect $50,000 dormitory.

W. Va., Landgraff—Clubhouse — Empire Coal & Coke Co. will erect clubhouse; 100x36 ft.; 3 stories; probably brick; asbestos shingle roof; cement floors; steam heat; Alex. B. Mahood, Archt., L. & C. Bldg., Bluefield.

Schools.

Ala., Anniston—Board of Missions for Freedmen Presbyterian Church, U. S. A., will erect school to replace structure lately noted burned; cost $100,000; 85x185 ft.; stone and brick; probably steam heat and electric lights; Thos. Stephen, Archt., Camden, N. J. (Lately noted.)

D. C., Washington—Georgetown University, Rev. Jno. B. Creedon, Prest., is considering

erection of $350,000 athletic stadium; seating capacity 20,000; Jno. W. Kearney, Archt.

Fla., Canal Point—Palm Beach County Board of Public Instruction, Agnes Ballard, Supt., West Palm Beach, will erect vocational school; 1 story; 4 rooms; stucco; will soon call for bids.

Fla., Gainesville—State Board of Control, Tallahassee, will erect auditorium, administration and museum building at State University; cost $100,000; authorized architect of board to advertise for bids to be opened Jan. 9 at Gainesville.

Fla., Inverness—Citrus County Board of Public Instruction, Jesse Montague, Supt., will not erect building as lately reported.

Fla., New Port Richey—Board of Education will erect high school on Cotee River between New Port Richey and Elfers; cost $40,000; brick.

Fla., Oviedo—Special Tax School Dist. No. 3, O. P. Swope, Chrmn., Bd. of Trustees, plans to erect school; cost $10,000 to $12,000; probably frame; $20,000 bonds to be sold Dec. 22.

Ga., Atlanta—Board of Education will erect grammar school at Houston and Sampson Sts.; 2 stories; 12,500 sq. ft.; 12 rooms; ordinary construction; tar and gravel roof; joist floor construction; reinforced concrete corridor floors; low pressure steam heat; A. Ten Eyck Brown, Archt., Forsyth Bldg.; Allan Artley is lowest bidder at $87,715. (Lately noted.)

Ga., Brunswick—Glynn County Board of Education, Chas. E. Dryden, Supt., will receive bids until Jan. 4 to erect school for colored pupils; cost $35,000; 10 class rooms and auditorium; hollow tile and brick; metal or gravel roof; yellow pine and concrete floors; Henrik Wallin, Archt., Savannah; plans and specifications at office Mr. Dryden. (Lately noted.)

Ga., Millen—Board of Education will erect high school; cost $27,000; auditorium to seat 700, 10 classrooms and laboratories; brick, hollow fireproof and interior tile; tin roof; pine floors, concrete in basement; heating plant, $9000; lighting, $1200; Scroggs & Ewing, Archt., Lamar Bldg., Augusta; Arnold Construction Co., Contr., Elberton. (Lately noted.)

Ga., Pitts—Board of Education will erect $30,000 school.

Ga., Savannah—Sacred Heart Parochial School will erect building at 33rd and Abercorn Sts.; cost $60,000; Levy & Clarke, Archts.

La., Natchitoches—State Normal College will erect girls' dormitory; 40x172x30 ft.; reinforced concrete and brick veneer; built-up pitch and felt roof; wood and concrete floors; hollow fireproof tile; interior tile; ventilators; will open bids Jan. 4. Address Dr. D. L. Roy, Prest. (Lately noted.)

La., New Orleans—Orleans Parish School Board, Nicholas Bauer, Secy., will receive bids until Dec. 23 to erect Gayarre School, Art and Robertson Sts.; about 143x75 ft.; 3 stories; brick; frame interior; tile roof; reinforced concrete foundation; hot water heat; E. A. Christy, Chief Archt., Bldg. Div., City Engineer's office. (Lately noted.)

La., Vernon—Jackson Parish School Board, Jonesboro, will erect high school; cost $25,000; 2 stories; 8 rooms; J. W. Smith, Archt., Monroe.

Md., Baltimore—Board of Awards, Mayor Wm. F. Broening, Prest., will erect school No. 67 at Forest Park to replace branch school No. 64; 8 or 10 rooms; ultimately enlarged to 24 rooms.

Miss., Aberdeen—Bartahatchie Consolidated School Trustees, F. L. Rye and others will receive bids until Jan. 2 at Courthouse to erect school; plans and specifications at office Horace G. Howell, County Supt. of Education and Joe T. Morgan, Chancery Clerk.

Miss., Flora—School District Trustees are concidering erecting $65,000 high school.

Miss., Ruleville—School Dist. Trustees will erect building; cost $30,000 to $40,000 including steam heat, plumbing and wiring; brick and stucco; built-up roof; will let contract in about 60 days; Kramer & Lindsley, Archts., Kress Bldg., Jackson.

Miss., Swiftown—Swiftown Consolidated School Dist. Trustees will erect building; $20,000 bonds voted.

Mo., Hartville—Hartville School Dist. voted $18,000 bonds. Address District School Trustees.

N. C., Asheville—City, Mayor Gallatin Roberts, Chrmn. Advisory School Comm., will erect Catholic Hill School for negroes, Catholic Ave. and Gibbons St.; cost $90,000; 58x225 ft.; 20 class rooms; auditorium, 90x50 ft.; Gothic style; brick, frame and hollow fireproof tile; composition roof; hardwood and composition floors; wire glass; hot air heat; electric lights; bids opened Dec. 20; also erect $110,000 school in North Asheville section; Ronald Greene, Archt. for both structures; erect school on Newton Academy property, South Asheville, cost $100,000; J. S. Zimmerman, Archt. (Lately noted in part.)

N. C., Candler—Candler School District Trustees will erect school; cost $50,000.

N. C., Davidson—Davidson College, Wm. J. Martin, Prest., will erect dormitory to accomodate about 115 students; cost $75,000; 42x110 ft.; 4 stories; brick; tin roof; pine floors in rooms, composition in halls; steam heat from central plant; electric lights; Robt. F. Smallwood, Archt., 70 Morningside Dr., New York. Address owner.

N. C., Elizabeth City—State Normal School for Colored, W. O. Saunders, Chrmn. Bldg. Comm., will erect administration building, principal's residence, practice school, construct sewerage and water supply systems; administration building 2 stories and basement; 90x150 ft.; fireproof; reinforced concrete; asbestos shingle and gravel roof; wood floors over concrete; hot water heat; electric lights; offices, 12 class rooms, 2 laboratories; auditorium to seat 750; cost about $100,000; bids opened Dec. 17 at office of Prof. P. W. Moore, Principal; plans from Jas. A. Salter, Archt., Raleigh. (Previously noted.)

N. C., Mount Ulla—Mount Ulla and Bear Poplar districts will consolidate and erect school; cost $40,000. Address District School Trustees.

N. C., Raleigh—Wake County Commissioners are considering calling election on bonds not to exceed $1,500,000 to erect high school, $500,000; building for Thompson School, $153,000; building for Wiley School, $153,000; addition to R. H. Lewis School, $50,000; addition to Pilot Mills School, $45,000; addition to Caraleigh Mills School, $45,000; negro schools, $175,000; Mayor T. B. Eldridge, Wade Marr and Supt. S. B. Underwood, Committee; C. Gadsden Sayre, Archt., Raleigh, and Anderson, S. C.; C. B. J. Snyder, Consit. Archt., 500 Park Ave., New York. (Lately noted.)

N. C., Southern Pines—City plans to issue $50,000 bonds to erect school. Address The Mayor.

N. C., Swannanoa—Swannanoa Consolidated School Dist. Trustees will erect school; $50,000 bonds voted; Frank Wells, Buncombe County Supt., Asheville. (Lately noted.)

N. C., Wilson—Wilson County Board of Education will erect school at Rock Ridge; cost $100,000.

Okla., Skiatook—School District voted $60,000 bonds to erect building. Address District School Trustees.

Okla., Tahlequah — Northeastern State Teachers' College will erect building for historical department; fireproof; cost $25,000

Okla., Wilson—Zaenig Consolidated School Dist. Trustees will erect school; cost $100,000; 12 class rooms and auditorium; J. B. White, Archt., Ardmore.

S. C., Charleston—Trustees of School Dist. No. 4 opened bids to erect school at Chicora Place; T. W. Worthy is lowest bidder at $14,610; D. B. Hyer, Archt., Peoples Bldg. (Lately noted.)

S. C., Charleston—Board of Education will erect school at Maggett; cost $50,000; brick and stone; Benson & Barbot, Archts.

S. C., North—School Dist. No. 34, E. C. Johson, Chrmn. Bd. of Trustees, will receive bids until Jan. 3 to erect school; plans and specifications at office Edwards & Sayward, Archts., Atlanta, Ga.

S. C., York—Board of Education will rebuild Miller School noted burned.

Tenn., Algood—Putnam County Board of Education, Cookeville, will erect $30,000 school; bonds available.

Tenn., Cookeville—Board of Education will erect school building; $75,000 bonds voted.

Tenn., Cookeville—See Tenn., Nashville.

Tenn., Johnson City—See Tenn., Nashville.

Tenn., Memphis—See Tenn., Nashville.

Tenn., Murfreesboro—See Tenn., Nashville.

Tenn., Nashville—State Board of Education, J. B. Brown, Secy., State Capitol, will receive bids until Jan. 5 to erect dormitory and other buildings at East Tennessee Normal School, Johnson City; R. H. Hunt Co., Archt., Chattanooga; Middle Tennessee Normal, Murfreesboro; Henry, C. Hibbs, Archt., Nashville; Agricultural & Industrial Normal, Nashville; Marr & Holman, Archts., Nashville; Tennessee Polytechnic Institute, Cookeville; Daugherty & Gardner, Archts., Nashville; West Tennessee Normal, Memphis; Mahan & Broadwell, Archts., Memphis; all structures brick, steel and hollow fireproof tile; metal ceilings; hardwood and concrete floors; steel sash and trim; wire glass; total cost about $600,000; blue prints and specifications at office architects. (Lately noted.)

Tenn., Mount Pleasant—City will receive bids until Jan. 11 to erect high school; separate bids for heating and plumbing, cost $60,000; 150x115 ft.; brick, hollow fireproof tile and frame; built-up roof; hardwood and concrete floors; ornamental terra cotta; interior tile; wire glass; steel sash and trim; ventilators; steam heat; electric lights; gas fixtures; plans and specifications at office W. B. Long, Secy., Mount Pleasant, and office Geo. D. Waller, Archt., Independent Life Bldg., Nashville. (Lately noted.)

Tenn., Nashville—Vanderbilt University, J. H. Kirkland, Chancellor, will soon call for bids to erect Medical and Dental building, 200-bed hospital, and memorial hall; latter structure to cost $250,000; 3 stories and basement; brick, stone and reinforced concrete; slab floor; H. C. Hibbs, Archt., Fourth and First Natl. Bank Bldg.; also erect stadium to seat 15,000; cost $150,000; Freeland & Roberts and Hart & Nevins, Archts.. (Lately noted in part.)

Tenn., Oliver Springs—County Board of Education, Kingston, will erect schools at South Harriman and Oliver Springs; bids received at office County Supt., Kingston, until Dec. 17; plans and specifications for both buildings at office S. A. Brazeale, Harriman, Chrmn. Bd. of Education, and for South Harriman building at office R. F. Graf & Sons, Archts., Knoxville, and Oliver Springs building at office Waters & Tarwater, Archts., Knoxville; former structure to cost $30,000; latter, $15,000; both buildings brick and interlocking tile; sheet metal roof; pine floors; steam heat, $4000 and $2000; electric lights.

Tex., Amarillo—School Board will erect $400,000 high school previously noted; 208x 195 ft.; fireproof and semi-fireproof; 4-ply built-up roof; concrete, wood, marble and tile floors; ornamental terra cotta; interior tile; metal doors; vaults; ventilators; heating plant about $25,000; Parker & Rittenberry, Archts. (See Machinery Wanted—Marble; Terra Cotta.)

Tex., Corsicana—State Board of Control, Austin, will erect school at State Orphans Home; cost $45,000; 100x60 ft.; 2 stories; fireproof; reinforced concrete and hollow fireproof tile; tar and gravel roof; ornamental terra cotta; maple and concrete floors; steel sash and trim; wire glass; rolling partitions; plaster board; metal ceilings; ventilators; steam heat; contract let between Jan. 5 and 10; H. O. Elanding, Archt., Hardy-Peck Bldg., Corsicana. (Lately noted.)

Tex., Georgetown—Southwestern University plans to erect fireproof gymnasium; cost $75,000.

Tex., Houston—City, O. F. Holcombe, Mayor, will vote on $1,500;000 school bonds. (Previously noted considering election on $750,000.)

Tex., Waxahachie—Palmyra School Dist. will erect building; Jno. Olsen, Co. School Supt.

Va., Portsmouth—City School Board will erect $18,000 school at Pinners Point.

Va., South Boston—Town, J. B. Wilborn, Mayor, will erect $60,000 school; brick; slate roof; hardwood floors; steam heat; electric lights; will vote Jan. 4 on $200,000 bonds to include $60,000 for school, etc. (Lately noted.)

W. Va., Barboursville—Morris-Harvey College will erect gymnasium; cost $25,000; 1 story; 60x80 ft.; brick; Wm. Francis Diehl, Archt., R. P. Bldg., Huntington.

W. Va., Lowsville—Board of Education will erect school building.

W. Va., Red Jacket—Magnolia Dist. Board of Education, N. L. Chauncey, Supt., Matewan, will erect school cost $20,000; 2 stories; 50x 30 ft.; brick and stone; bids opened Dec. 20.

Stores.

Ala., Tuscaloosa—McLester Hotel Co. will erect store building; hollow tile; tar and gravel roof; cement floors; construction by owner; work begun.

Fla., Callahan—R. L. Jones will erect brick store to replace burned structure.

Ga., Atlanta—Eugene V. Haynes will erect building at Fairlee and James Sts. for 7 stores; cost $15,000; interlocking tile and brick; A. F. N. Everett, Archt.

Ga., Columbus—F. W. Woolworth Co., J. F. Nutting, Prest., New York, is reported to expend $40,000 to remodel Needham Building.

Mo., St. Louis—Missouri Botanical Gardens will erect building at 6th and St. Charles Sts. to be leased by Feltman & Curme Shoe Stores Co., Chicago; 66x99 ft.; 3 stories; plate glass windows; interior finished in terra cotta; Jas. P. Jamieson, Security Bldg., and Geo. W. Spearl, 319 N. 4th St.. Archts.

N. C., Hendersonville—Marshall Brownlow Jackson will erect building on W. 4th Ave.; store on lower floor; apartments and offices above.

N. C., Wilmington—Geo. Oflesh and Christine Adrian will erect 2-story brick building on S. Front St.

Okla., Enid—Dawson Produce Co. will erect business building; cost $25,000; 50x150 ft.; 2 stories; brick; built-up composition roof; yellow pine and concrete floors; metal doors; rolling partitions; steel sash and trim; ventilators; gas heat; electric lights; electric elevators, 4000 lbs.; bids opened about Dec. 15; R. W. Shaw, Archt. (Lately noted.)

Tenn., Greenfield—Allen, Shannon & Co. will rebuild burned store on Cedar St.

Tenn., Murfreesboro—T. T. Everitt will erect store building; 1 story; 66x75 ft.; brick; construction by owner with day labor.

Tex., Dallas—Mrs. Imogene Smith will erect 2-story store at 1404 N. Haskell Ave.; cost $20,000.

Tex., Grovesbeck—Hardy Browder will erect two 1-story brick business buildings on Ellis St.

Va., Pulaski—Blue Grass Hardware Co., M. L. Harris, Prest., will erect store; cost $35,-000; 3 stories and basement; 50x130 ft.; brick and steel; plans and construction by owner.

W. Va., Bluefield—J. L. Crockett and R. W. Honaker will erect 2-story building on Federal St.

W. Va., Charleston—Loewenstein Realty Co. will erect store and office building; 3 stories and basement; 45x100 ft.; brick; limestone trim; cost $50,000; Malcolm H. White, Archt., Odd Fellows Bldg.

Theaters.

D. C., Chevy Chase—Chevy Chase Amusement Corpn. will erect theater on Connecticut Ave. between Northampton and McKinley Sts., N. W.; cost $125,000; brick, terra cotta, hollow tile and concrete; seating capacity, 1150; top floor for dancing and assembly hall to accomdate 500; Upman & Adams, Archts., Woodward Bldg., Washington. (Lately noted.)

Warehouses.

Fla., Palmetto—J. L. Thomason, Lakeland, plans to erect grain warehouse; 50x78 ft.

N. C., Wilson—Builders Material Co., Jno. E. Elmenderff, Secy.-Treas., will erect warehouse; 2 stories; 60x160 ft.; brick; cost $45,-000.

Tex., Dallas—R. H. Stewart will erect warehouse; cost $20,000; 60x160 ft.; 3 stories; brick and mill construction; tar and gravel roof; pine floors; gas heat; 18-ft. freight elevator, $3000; construction by G. W. Baxter upon percentage basis; materials purchased.

BUILDING CONTRACTS AWARDED

Apartment-Houses.

Mo., St. Louis—Best Realty & Investment Co., 322 Central Natl. Bank Bldg., will erect 2 apartment houses; cost $30,000 each; 6 suites; 3 stories; 41x55 ft.; plans by owner; J. M. Morau, Contr., 230 Title Guaranty Bldg.

Tenn., Memphis—A. E. Bird will erect $20,-000 apartment house at 1808 N. Parkway; 4 suites; brick veneer; R. L. Sieg, Archt.; Blair Const. Co., Contr.

Tenn., Memphis—M. H. Smith is erecting $15,000 duplex apartment house at 1999 Central Ave.; brick veneer; Chas. Deas, Archt.; Sims & Holley, Contrs.

Association and Fraternal.

Ala., Mobile—Mobile Council No. 666, K. of C., will expend $10,000 to $12,000 to enlarge and improve building at 602 Government St.; A. H. Downey, Archt.; John W. Barter, Contr. (Lately noted.)

Ark., Little Rock—Scottish Rite Masons, C. E. Rosenbaum, Chrmn. Board of Trustees, will erect Albert Pike Memorial Temple; cost $800,000 to $850,000; 4 stories; 250x140 ft.; fireproof; asbestos roof; oak, cement, tile and marble floors; steam heat; electric lights; hollow fireproof tile; interior tile; metal doors; vaults; vault lights; ventilators; steel sash and trim; metal windows; Mann & Stern, Archts.; John Thalman, Contr. (Lately noted.)

Okla., Oklahoma City—Masonic Temple Building Assn. will erect $900,000 building; 135x250 ft.; steel and reinforced concrete; Barrett specification and promenade tile roof; marble, concrete, ceramic tile and hardwood floors; electric forced ventilation air ducts; city lighting; hollow fireproof tile; plaster board; interior tile; metal doors; wire glass; vaults; safes; steel sash and trim; Layton, Smith, Forsythe & Co., Archts.; Campbell & Price, Contrs. (Previously noted.)

Bank and Office.

Ga., Augusta—Citizens & Southern Bank, I. S. Ferguson, V.-P., will improve building; Lawrence Const. Co., Contr.

Tenn., Knoxville—Candora Marble Co. will erect fireproof office building; marble exterior; V. L. Nicholson, Contr., 711 Henley St., P. O. Box 661.

Va., Stafford Court House—People's Bank of Stafford will erect $10,000 building; 1 story; 26x38 ft.; brick; concrete foundation; slate surfaced shingle roof; maple floors; concrete vault; safes; bank fixtures; Phillip N. Stern, Archt.; Walter Snellings, Contr., both Fredericksburg.

Churches.

Md., Govans, Sta. Baltimore—Trustees, Gregory Memorial Baptist Church, Rev. W. H. Brannock, will erect $15,000 annex; 50x 60 ft.; stone; slag roof; Georgia pine floors; rolling partitions; steam heat; electric lights; Graham Cranston, Contr., Govans. (Lately noted.)

N. C., Asheville—Trinity Episcopal Church, Walter Taylor, Chrmn. Bldg. Comm., will erect $32,000 Sunday school building; 2 stories; 38x74 ft.; brick; composition shingle roof; white oak floors; heating contract not let; electric lights; rolling partitions; W. H. Lord, Archt.; L. L. Merchant, Contr. (Lately noted.)

Tex., San Antonio—Beacon Hill Baptist Church will erect $13,000 church and Sunday school building; L shape; extreme dimensions, 144x90 ft.; frame; roll composition roof; jacketed stoves; Will. N. Noonan, Archt., 448 Moore Bldg.; John Hagy, Contr. (Lately noted.)

City and County.

Fla., West Palm Beach—Jail—Board of County Commrs., Hector Harris, Chrmn., will erect jail building; W. C. Daniels, contr. at $64,450; rejected bids for steel work and will open new bids Dec. 28. (Lately noted.)

Ga., Atlanta—Library—City, J. W. Mason, Chrmn. Bldg. Comm., will erect branch library at Bellewood and English Aves.; J. S. McCauley, Contr. (Lately noted.)

Okla., Cordell—City Hall—City, Carl Copeland, Mayor, will erect $50,000 city hall; 2 stories and basement; 75x95 ft.; A. F. Stewart, Archt.; A. F. Stewart Co., Contr., both Natl. Bank Bldg., Oklahoma City.

Dwellings.

Fla., Eustis—Peter and Henry Bartelman will each erect residence; former on Lemon Ave. and Grove St.; latter on Key Ave.; contracts let.

Fla., Howey—Fuquay & Gheen, Daytona Beach, have contract to erect number of residences. (See Hotels.)

Fla., St. Petersburg—A. Louis Kuehmsted, Chicago, will erect $25,000 residence on Bayshore Blvd.; brick and stucco; stone trim; tile roof; W. S. Shull, Archt.; Chas. Dubois, Contr. (Lately noted.)

Fla., St. Petersburg—H. W. McClelland will erect $15,000 residence at Beach Dr. and 15th St.; 2 stories; 8 rooms; brick veneer; Horace C. Margerum, Contr.

Fla., West Palm Beach—Associated Home Builders Co., T. H. Stephens, Prest., will erect number of dwellings and apartment houses; cost $1500 up; various dimensions; plans by owner; Newlon & Stephens, Contrs. (Lately noted.)

N. C., Charlotte—E. E. Boyce will erect residence on E. Morehead St., Myers Park; 2 stories; frame; 9 rooms; cost $12,000; Myers Park Building Cc., Contr.

Tenn., Memphis—Abraham Scharff will erect $20,000 residence on Poplar Pike; stucco and half timber; 2 stories; hand split variegated colored shingle roof; Jones & Furbringer, Archts.; Erich Ivaerson, Contr.

Tenn., Memphis—H. K. Reese will erect $45,000 residence at Central and Highland Aves.; W. T. Hudson, Contr.

Tenn., Memphis—J. L. Mercer will erect $12,000 residence at 297 Stonewall Pl.; 2 stories; brick veneer; Clinton Bldg. Co., Contr.

Government and State.

Fla., Tallahassee—Capitol—Board of Commrs. of State Institutions will erect extensions to capitol building; 2 wings; brick; wood joists; slate roof with copper gutters; steel roof trusses; concrete, hardwood and composition floors; vacuum heat; safes; metal doors; ventilators; steel sash and trim; H. J. Kluthe, Archt., 501 St. James Bldg., Jacksonville; Parker & Yeager, Tallahassee, contrs. at $153,000; Frank Mosley, Panama City, plumbing, $5446, heating, $10,944, and electrical work, $7005. (Lately noted.)

Hospitals, Sanitariums, Etc.

Ala., Birmingham—Sisters of Charity will erect $100,000 addition to St. Vincent's Hospital; 4 stories; Harry B. Wheelock, Archt.; Evans Bros., Contrs.

Tex., Kerrville—Building Board of American Legion Memorial Hospital of Texas, Austin, will erect infirmary building, laundry building, boiler house, nurses' home, pump house, oil storage tank, smoke house, tunnels for steam pipes, etc.; Phelps & Dewees, Archts., Gunter Bldg.; McKenzie Const. Co., contr. at $270,000; Elder Constr. Co., contr. for tunnels and conduits at $26,370; A. H. Shafer, plumbing at $22,448; vacuum cleaning at $528; Graham & Collins, outside electrical work at $15,080, all San Antonio; John D. Martin, Austin, heating, $9924; vacuum cleaning, $1161; outside piping and boiler house work, $53,571; electrical work, $5861; Eugene Ashe Electrical Co., Fort Worth, telephone and switchboard, $2470; Smith & Whitney, Dallas, boilers, $23,280; American Laundry Co., laundry machinery, $30,367; Otis Elevator Co., elevator, $4460. (Lately noted.)

Tex., Wichita Falls—Wichita Falls General Hospital will erect $75,000 addition; bids opened Dec. 19.

Md., Baltimore—Sisters of Charity, Mount Hope Retreat, will erect building at Mount Hope Ave. and Western Maryland R. R.; fireproof; 1 story; 26.6x70.11 ft.; slate roof; cost $18,000; Jno. T. Bramble, Archt.-Contr., 2 E. Lexington St.

Md., Baltimore—Johns Hopkins Hospital, Dr. Winford H. Smith, Supt., will erect dispensary building for Harriet Lane Home; cost $20,000; 1 story; 30x52 ft.; brick and limestone; slag roof on concrete; cement floors; heating not in general contract; Archer & Allen, Archts., Central Savings Bank Bldg.; Morrow Bros., Contrs., Fidelity Bldg. (Previously noted.)

Hotels.

Fla., Howey—Fuquay & Gheen, Daytona Beach, have contract to erect 300-room hotel and number of residences.

Tex., Lufkin—Lufkin Hotel Co. will erect $90,000 hotel; 38x114 ft.; 5 stories; 67 rooms; fireproof; reinforced concrete; Barrett roofing; hollow fireproof and interior tile; metal ceilings; metal doors; concrete floors; ventilators; steel sash and trim; safes; wire glass; gravity steam heat; elevators; Jones & Tabor, Archts., Binz Bldg., Houston; K. H. Muse, Contr., Lufkin. (Lately noted.)

Va., Accomac—Accomac Hotel Co. will erect $28,000 building; 40x56 ft.; 4 stories; brick and hollow fireproof tile; interior tile; metal doors; plaster board; slate roof; rift pine and concrete floors; steel sash and trim; hot water heat, $3000; lighting, $500; Robt. W. Gardner, Archt., 43 Cedar St., New York; C. H. Legg, Contr., Cape Charles, Va.

Miscellaneous.

Tenn., Memphis—Grandstand — Memphis Baseball Assn. will erect grandstand to seat 10,000; cost $88,000; steel, concrete and wood; C. O. Pfeil, Archt.; E. J. Pearson, Contr.

Railway Stations, Sheds, Etc.

S. C., Belton—Piedmont & Northern Ry., E. Thompson, V.-P.-Gen. Mgr., Charlotte, N. C., will erect passenger station; Fiske-Carter Constr. Co., Contr., Greenville, S. C. (Lately noted.)

W. Va., Logan—Chesapeake & Ohio R. R., F. I. Cabell, Ch. Engr., Richmond, Va., will erect passenger station; 30x100 ft.; brick; terra cotta trim; slate roof; covered platforms; will also erect 30x100 ft. frame baggage and express building; cost $70,000; slate roof; steam heat; electric lights; Jno. P. Pettyjohn & Co., Contrs., Lynchburg, Va. (Lately noted.)

Schools.

Ala., Walnut Grove—Etowah County Board of Education, E. P. Murphy, Supt., Gadsden, will erect school; cost $10,000; 74x50 ft.; 6 classrooms; frame; composition roof; pine floors; W. A. Horton, Contr., Boaz. (Lately noted.)

Ga., Middleton—Board of Trustees, J. Gordon, Chrmn., R. F. D. No. 1, will erect school near Middleton; cost $8000; 6 rooms; frame; metal shingle roof; double wood floors; hardwood surface; Dye, Mauldin Co., Contr. (See Machinery Wanted—School Equipment; Seating; Blackboards; Tables.)

La., Egan—Arcadia Parish School Board, Crowley, will erect school; cost $30,000; 2 stories; brick; composition roof; wood floors; low pressure steam heat; electric lights; Nolan & Torre, Archts., Hennen Bldg., New Orleans; Knapp & East, Contrs., Lake Charles; H. N. Moody, New Orleans, plumbing and heating. (Lately noted.)

Miss., Columbia—State Bond Improvement Commission, Jackson, let following contracts in connection with erection of hospital at State Industrial Training School; Heating, J. W. Hull Heating & Plumbing Co., Memphis, Tenn., $4418; plumbing, C. J. Gleason, Augusta, Ga., $6694; wiring, E. A. Koeneman Electrical Co., St. Louis, $2514; also let contract for creamery building at college to M. Dye, Columbia, at $2055; 2 cottages to F. Hopkins, Jr., Meridian, Miss., at $10,325; one cottage to M. Dye at $3150; Theo. C. Link, Supervising Archt. and Director of Public Works, P. O. Box 636, Jackson. (Lately noted.)

Miss., Hattiesburg—State Bond Improvement Commission, Jackson, let contract to C. O. Eure Construction Co., Hattiesburg, to erect 3 cottages at State Normal College; Theo. C. Link, Supervising Archt. and Director of Public Works, P. O. Box 636, Jackson. (Lately noted.)

Miss., Starksville—State Bond Improvement Commission, Jackson, let following contracts for biology building at Agricultural and Mechanical College; Heating, Parks-Kramer Co., Charlotte, N. C., $8544; plumbing, Southern Equipment Co., Laurel, Miss., $7596; wiring, E. A. Koeneman Electrical Co., St. Louis, Mo., $2933; Theo. C. Link, Supervising Archt. and Director of Public Works, P. O. Box 636, Jackson, Miss. (Lately noted.)

N. C., Norlina—Warren County Board of Education, J. Edwin Allen, Supt., Warrenton, will erect addition to school; brick; metal roof; 8 class rooms and partial basement; C. Gadsden Sayre, Archt., Anderson, S. C.; J. W. Stout & Co., Sanford, N. C., Contrs., exclusive of electric wiring and revarnishing interior of wood work. (Lately noted.)

Okla., Tulsa—Board of Education, Geo. MacCurdy, Secy., will erect addition to Roosevelt School; cost $35,000; 1 story and basement; Geo. Winkler, Archt., Palace Bldg.; A. T. Hingle, Contr., Mayo Bldg. (Lately noted.)

Okla., Tulsa—Board of Education, Geo. E. MacCurdy, Secy., will erect auditorium and gymnasium at Jefferson School; 1 and 2 stories and basement; 61x78 ft.; A. T. Hingle, Contr. at $19,999; Knowles & Green, heating and plumbing, $3200.

Tenn., Maryville—Blount County Board of Education, J. H. Mizer Supt., will erect Plainfield School; 50x80 ft.; 8 class rooms; brick and concrete; H. C. Fonda, Maryville, contr. at $19,233; also erect Bungalowtown school; 4 rooms and assembly hall; G. L. Vineyard, Maryville, contr. at $6707; Manley & Young, Knoxville, Archts. for both structures. (Lately noted.)

Tex., San Antonio—Sisters Servants of Holy Ghost will erect school and mother house; cost $63,000; 45x 85 ft.; fireproof; concrete, hollow fireproof tile and brick; asbestos slate shingle roof; interior tile; cement, wood and mosaic tile floors; ventilators; steam heat; electric lights; hand power dumb waiter; Leo M. J. Dielmann, Archt.; J. H. Wagner & Sons, Contrs., Grayburg Bldg. (Lately noted under Miscellaneous.)

Tex., Fort Worth—Forest Hill School Dist. will erect building near Ft. Worth; cost $16,000; 52x72 ft.; brick and tile; tar and gravel roof; stoves; Wm. C. Neador, Archt., Dan Waggoner Bldg.; Cain & Estill, Contrs., Reynolds Bldg. (Lately noted.)

Stores.

Mo., Kansas City—Morris Frankenstein will erect building; 1 story and basement; 60x50 ft.; brick; stone trim; built-up gravel roof; yellow pine and hardwood floors; metal ceilings; wire glass; city lights; Victor J. De Foe, Archt., 1125 Scarritt Bldg. Address Barney Tanhoof, Contr., 2219 E. 21st St. (Lately noted.)

Tenn., Memphis—F. B. Gianotti will erect 4 stores on Union Ave. between Willett and Rozell Sts.; J. M. Reeves & Son, Contrs.

Tenn., Memphis—Mrs. Mary B. Hadden will erect 2-story brick building at Madison Ave. and 4th St.; 25x148 ft.; cost $25,000; first floor for stores; upper floor apartments; Estes-William-Ragsdale Co., Contr.

Tex., Sweetwater—Rufus Wright will erect brick and concrete business building on Oak St.; contract let.

Theaters.

Va., Danville—Southern Amusement Co., J. C. Hester, Secy.-Treas., will erect theater, store and office building on Main St.; 50x187 ft.; brick and frame; ornamental terra cotta; metal ceilings; interior tile; tar and gravel roof; wire glass; wood floors; ventilators; theater to have seating capacity of 2000; cost $180,000; C. K. Howell, Archt., 35 Poplar St.; L. B. Flora, Contr. (Lately noted.)

Va., Danville—Southern Amusement Co. will erect picture and vaudeville theater; cost $180,000; 65x105 ft.; 2 stories; steel, frame, brick, concrete and hollow fireproof tile; metal ceilings; composition roof; pine, tile, wood block and concrete floors; ornamental terra cotta; interior tile; metal doors; wire glass; steel sash and trim; ventilators; vault lights; mail chutes; lighting, $12,000; C. K. Howell, Archt., Savannah, Ga.; L. B. Flora & Son, Contrs., Danville. (Lately noted.)

Warehouses.

Tenn., Memphis—Bosworth Bag Co. will erect 1-story iron-clad warehouse at 1049 Texas St.; cost $15,000; D. D. Thomas & Son, Contrs.

W. Va., Parkersburg—International Harvester Co. of America, Chicago, will erect warehouse addition; 2 stories and basement; 75x45 ft.; W. D. Price, Archt., 606 Michigan Ave., Chicago; Plate & Vogel, Contrs., Parkersburg.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Advertising Material.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C. — Advertising material for medical preparations. (See Construction News — Miscellaneous Factories.)

Blackboards.—J. Gordon Jones, Chrmn. Bd. of Trustees, R. F. D. No. 1, Middleton, Ga.—See School Equipment.

Blocks (Wooden). — Fabriche Riunite Formenti, Carate Brianza, Milano, Italy.—Names and addresses mfrs. of wooden blocks suitable for shuttle factory, prefer corresponding directly with mills.

Boiler.—Crawford Mill Supply Co., Winston-Salem, N. C.—100 H. P. stationary boiler, used if in good condition.

Boiler.—J. W. Starr & Sons, Woodland, Ga.—60 H. P. steam engine.

Boiler (Return Tubular).—Georgia Fullers Earth Co., D. W. Baily, Lumpkin, Ga.—Second-hand return tubular boiler, 200 to 250 H. P., 150 lbs. pressure.

Boilers, Engines, etc.—W. W. Faison, Supt., State Hospital, Goldsboro, N. C.—Bids until Dec. 20 to furnish boilers, engines and electric generating equipment; H. A. Underwood, Engr., 912 Commercial Bank Bldg., Raleigh, N. C.; Wiley & Wilson, Consit. Engrs., Lynchburg, Va.

Boring Mill.—L. F. Seyfert's Sons, 437 N. 3rd St., Philadelphia, Pa.—New Lucas boring mill, style 31 or 32.

Bottles.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C.—Bottles for medical preparations. (See Construction News—Miscellaneous Factories.)

Brick (Face).—G. S. Glenn, Walters, Okla.—Bids until Dec. 27 for face brick. (See Buildings Proposed, Association and Fraternal, Okla., Comanche.)

Bridge Construction.—Calcasieu Parish, W. J. Prater, Prest. Police Jury, Lake Charles, La.—Bids until Jan. 10 to build Moss Bluff Highway Bridge across Calcasieu river including steel highway bridge and reinforced concrete or creosoted timber approach trestle across adjacent marsh together with steel lift span with 94-ft. clear opening; entire structure will be 1450-ft. long and either 18 or 20-ft. in clear width; plans, etc., on file with Parish Clk., Lake Charles, and Terrell Bartlett, Engrs., Calcasieu Bldg., San Antonio, Tex. (See Construction News—Bridges, Culverts, Viaducts, Etc.

Bridge Construction.—Escambia County, Jas. Macgibbon, Clk., Pensacola, Fla.—Bids until Jan. 10 to build concrete bridge with concrete abutments and earth approaches across Carpenter's Creek; plans, etc., on file. (See Construction News — Bridges, Culverts, Viaducts, Etc.)

Bridge Construction.—Ky. State Highway Comsn., Frankfort, Ky.—Bids to build 250-ft. span bridge over Clover Creek in Breckenridge County; reinforced concrete abutments on creosoted piles; cost $90,000; bids opened Dec. 21. (See Construction News—Bridges, Culverts, Viaducts.)

Bridge Construction.—Orangeburg County, L. K. Sturkie, Clk., Orangeburg, S. C.—Bids to build bridges on Five Chop road including 200-ft. bridge and 2 culverts; bids opened Dec. 20; plans, etc., on file. (See Construction News—Bridges, Culverts, Viaducts.)

Brushes.—O. W. Connor, Lancaster, S. C.—To correspond with mfrs. of brushes about 6 ft. long and round, similar to gin brush.

Building Material.—W. B. Wingate, Callahan, Fla.—Prices on metal ceiling, roofing and metal walls.

Canal Construction.—M. B. Pringle, City Mgr. of New Smyrna, Fla.—Bids about Dec. 22 to cover canal, sides to be walled with concrete, cement sidewalks on top; estimated cost $30,000. (See Construction News—Miscellaneous Construction.)

Cartons.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C.—Cartons for medical preparations. (See Construction News—Miscellaneous Factories.)

Cases (Metal File).—Joseph Stolz & Son, Commerce Ave., Highbridge Station, New York City, N. Y.—Metal file cases, four drawer, legal size, prefer with lock; submit cuts and description with prices.

Catalogs on Municipal Projects.—M. B. Pringle, City Mgr. of New Smyrna, Fla.—Catalogs on municipal projects including water works, parks, roads, fire fighting equipment, gas and electric plants, street illumination, drainage, traffic regulations, etc.

Chain (Steel Coil).—C. C. Moseley, Lyons, Ga.—High grade, 1-in. steel coil chain.

Cigar Containers.—Peerless Cigar Co., W. J. Doyle, V.-P. and Mgr., 405½ Garrison Ave., Fort Smith, Ark.—Prices on cigar cans and boxes. (See Construction News—Miscellaneous Factories.)

Cigar Manufacturers' Supplies.—Peerless Cigar Co., W. J. Doyle, V.-P. and Mgr., 405½ Garrison Ave., Fort Smith, Ark.—Prices on cigar mfrs.' supplies; all kinds. (See Construction News — Miscellaneous Factories.)

Compressor (Air).—O. W. Connor, Lancaster, S. C.—To correspond with mfrs. air compressors; also catalogs of parts.

Conveyors, etc.—Georgia Fullers Earth Co., D. W. Bailey, Lumpkin, Ga.—Conveyors and field mchy.

Crane.—Coleman-Shoemaker, Inc., Commercial Trust Bldg., Philadelphia, Pa.—Hand operated traveling crane, 40 ft. span, 10 ton capacity.

Creamery Equipment.—Meadowoak Farms, M. O. Chase, Secy., Treas. and Gen. Mgr., Bartow, Fla.—Creamery equipment. (See Construction News — Miscellaneous Factories.)

Crushers (Jaw.)—Rampus Stone Co., Strawberry Plains, Tenn.—Jaw crusher 48x60-in. opening.

Cutter (Brick).—Box 824, Columbus, Ga. J. C. Steele & Sons, second-hand No. 18 automatic side brick cutter, right hand.

Cylinder (Air) Head. — Bald Mountain Quarries, Winston-Salem, N. C.—Front head No. 201 for low pressure air cylinder class A.A. No. 2; wire price.

Dies (Embossing).—James Lawrence, 428 Willow Ave., Altoona, Pa.—Names and addresses mfrs. of embossing dies.

Dragline.—T. J. Lane Equipment Co., 1030 W. Main St., Springfield, O.—1 or 1½ yd. Walker dragline with gasoline or oil engine, 20 ft. span, 24-30-ft. boom; immediate delivery.

Dredge Pontoon Catamarans.—U. S. Engr. Office, Mobile, Ala.—Bids until Jan. 20 for dredge on pontoon catamarans with discharge pipe for the U. S. 20-in. hydraulic dredge; information on application.

Dredging.—Belzoni Drainage Dist. Commrs., S. Castleman, Prest., Citizens Bank and Trust Co. Bldg., Belzoni, Miss.—Bids until Jan. 4 to redredge and clean about 100 mi. dredged ditches; C. E. Miller, Engr. (See Construction News—Drainage Systems.)

Drugs.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C.—Sugar, bismuth subnitrate, F. E. rhubarb, F. E. hydrastis, potassium carbonate, carbolic acid, spirits cinnamon, oil menthae peppermint, fluid extract cayenne pepper, crude and refined forms; all in bulk. (See Construction News—Miscellaneous Factories.)

Dry Kiln Fixtures.—Mercantile Lumber Co., J. T. Allen, Jackson, Miss.—Bids open for dry kiln fixtures.

Dye Outfit.—Carolina Bagging Co., Henderson, N. C.—Small dyeing outfit, either new or second-hand.

Electrical Equipment.—W. V. Sullivan, 619 Call Bldg., San Francisco, Cal.—One turbo unit 1000 to 1500 KW condensing, 3 phase, 66 cycle, 2300 volts and one turbo unit 500 to 750 KW condensing, 3 phase, 60 cycle, 480 volts complete with auxiliaries.

Electric Light Plants, Etc.—W. B. Greenlaw, Columbia, Tenn.—Small electric light plant and storage batteries.

Elevators.—Georgia Fullers Earth Co., D. W. Bailey, Lumpkin, Ga.—Elevators.

Engine.—Box 824, Columbus, Ga.—Second-hand 75 to 100 H. P. right hand Corliss engine.

Engine.—Crawford Mill Supply Co., Winston-Salem, N. C.—75 H. P. Corliss or slide valve engine.

Engine.—J. W. Starr & Sons, Woodland, Ga.,—60 H. P. engine.

Excavator (Dragline).—Georgia Fullers Earth Co., D. W. Baily, Lumpkin, Ga.—Second-hand dragline excavator.

Extinguishers (Fire).—White Furniture Co., Mebane, N. C.—Several doz. fire extinguishers.

Farming Implements, etc. — Hastings Machine Co., Hastings, Fla.—To represent mfrs. of farming implements, tractors, etc.

Filter Pipe and Fittings.—City, E. L. Gibson, Secy., Newcastle, Tex.—Complete set of cast iron water filter pipe and fittings. (See Construction News — Water-Works.)

Filter (Sand.)—J. R. Morris, Chrm., Special Water Committee, National Bank Bldg., Charlottsville, Va.—Bids until Dec. 20 for slow sand filter plant; plans and specifications with Chrmn.

Fire Plugs.—City, E. L. Gibson, Secy., Newcastle, Tex.—Fire plugs. (See Construction News—Water-Works.)

Folders, etc.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C.—Folders, booklets, etc., on medical preparations. (See Construction News—Miscellaneous Factories.)

Furnace (Gas or Oil). — Coleman-Shoemaker, Commercial Trust Bldg., Philadelphia, Pa.—Small gas or oil annealing furnace.

Gasoline, Kerosene, etc.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until Dec. 27 to furnish gasoline, kerosene and fuel oil during period Jan. 1, 1922 to Mch. 31, 1922 at Portsmouth, N. H., New York City, N. Y., Dover, N. J., Philadelphia, Pa., Annapolis, Md., Quantico, Va., Yorktown, Va., Norfolk, Va., Charleston, S. C., Washington, D. C., and Paris Island, S. C.; plans and information obtainable at this office; Sch. 170.

Golf Equipment.—Hickory Country Club, A. A. Shuford, Jr., Prest., Hickory, N. C.—Data and prices on golf equipment for greens, tees, etc.

Grass Seeds.—Hickory Country Club, A. A. Shuford, Jr., Prest., Hickory, N. C.—Data and prices on grass seeds.

Hose (Fire).—Baton Rouge Fire Dept., W. P. Burden, Auditor, Baton Rouge, La.—Bids until Dec. 24 to furnish 2000 ft. of 2½-in. double jacket, rubber lined cotton fire hose, coupled.

Hydro Therapeutic Equipment, Etc.—Treasury Dept., Supvg. Archt's Office, Washington, D. C.—Bids until Dec. 22 for Hydro therapeutic equipment, pumps, tanks, air compressor, etc., U. S. Public Health Service Hospital, Gulfport, Miss.; plans on file.

Incinerator.—Dept. of Public Finance, R. M. Murphy, Commr., New Orleans, La.—Bids until Jan. 4 to furnish labor, materials and equipment to construct garbage incinerator; plans with John Klorer, City Engr. (See Construction News—Miscellaneous Enterprises.)

Labels.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C.—Labels for medical preparations. (See Construction News—Miscellaneous Factories.)

Launch (Steel). — Cunberland Commodities, 28th and West End, Nashville, Tenn.—Bids on steel hull launch, 20x60 feet, kerosene burning engines with refrigeration plant aboard.

Laundry Drying Machine.—Coleman-Shoemaker, Commercial Trust Bldg., Philadelphia, Pa.—16 or 20-in. laundry drying machine, prefer Wizard.

Light (Beacon).—M. C. Price, Mgr., of City of Punta Gorda, Fla.—To correspond with mfrs. of river beacon light, to operate week or more without attention.

Locomotive (Saddle Tank).—T. J. Lane Equipment Co., 1030 W. Main St., Springfield, O.—25 ton standard gauge 040 saddle tank locomotive, for Ohio service.

Lumber.—C. M. Wall & Son, Lexington, N. C.—1,000,000 board ft. of sap gum lumber, 4/4 and 5/4-in. thick; also all kinds of dimension stock as flooring, ceiling, siding, etc.

Machine Shop Tools.—Hastings Machine Co., Hastings, Fla.—Catalogs on new and second-hand machine tools. (See Construction News—Motor Cars, Garages, Tires, etc.)

Mains (Water). — Associate Reformed Presbyterian Assembly, E. C. Stuart, Prest., Tampa, Fla.—Water mains. (See Construction News—Water-Works.)

Marble.—Parker & Rittenberry, Amarillo, Tex.—Samples of marble.

Metal Ceilings. — G. S. Glenn, Walters, Okla.—Bids until Dec. 27 for metal ceilings. (See Buildings Proposed, Association and Fraternal, Okla., Comanche.)

Metal Ceiling.—W. B. Wingate, Callahan, Fla.—See Building Material.

Motors.—Southern Rice Milling Co., 305 S. Peters St., New Orleans, La.—Data and prices on three 100-H. P., and two 50-H. P. motors. (See Construction News — Flour, Feed and Meal Mills.)

Moving Picture Machinery.—E. E. Bevil, Bradford, Tenn. — Equipment for moving picture machinery.

Needle Machinery, etc. — Wm. A. Burr, Tampico, Tames, Mexico.—Mchy. for mfre. of needles, pen points, pins, etc.

Oil.—City of Natchez, Miss., C. C. Crothers, Clk.—Bids until Jan. 18 for 25 cars of oil, delivered f. o. b. Natchez.

Paving.—City, Chas. Burt, Clk., Palatka, Fla.—Bids until Jan. 10 to construct and set 20,000 lin. ft. concrete curb; lay 13,000 sq. yds. brick paving; plans, etc., on file; Jno. H. Randolph, City Engr. (See Construction News—Road and Street Construction.)

Paving. — City, John H. Tomme, Mgr., Mangum, Okla.—Bids until Dec. 28 to pave Street Improvement Dist. No. 2 including portions of W. Pierce St., Maryland Ave. and Tyler St.; 11,640 sq. yds. asphaltic concrete on concrete base; Benham & Mullergren, Consit. Engrs., Firestone Bldg., Kansas City, Mo. (See Construction News—Road and Street Construction.)

Paving.—City M. R. Anderson, Mayor, Lake Wales, Fla.-Bids until Jan. 31 to pave streets; about $600,000; J. W. Turner, City Engr., Lakeland, Fla. (See Construction News—Road and Street Construction.

Paving.—City, S. A. Davis, Clk., Athens, Ala.—Bids until Dec. 30 to construct curb, gutter, paving and spread seal coat on certain waterbound macadam streets within districts described in Ordinances 33 and 34; 15,835 lin. ft. concrete curb and gutter; 50,700 sq. yds. bituminous seal coat; 2,900 sq. yds. waterbound macadam with seal coat; etc.; specifications from City Engr. (See Construction News—Road and Street Construction.)

Paving.—City, W. E. Sheddan, Acting City Engr., Jacksonville, Fla.—Bids until Dec. 29 to construct 22,230 sq. yds. asphaltic concrete pavement on 6 in. concrete base; cost $113,988.85. (See Construction News—Road and Street Construction.)

Paving. — City, W. F. Blackston, Clk., Winona, Miss.—Bids until Jan. 3 to conⁿ ruct 14,081 sq. yds. monolithic concrete paving; 3,200 ft. curb and gutter; plans, etc., on file. (See Construction News—Road and Street Construction.)

Paving.—Greenbrier County Court, Lewisburg, W. Va.—Bids until Jan. 3 to grade, drain and pave 5 mi. Blue Sulphur Turnpike from Alderson toward Blue Sulphur Springs; 27,333 sq. yds. penetration macadam surface 3 in. deep; 25,200 sq. yds. base course 6 in. deep; 11,200 sq. yds. stone shoulders; plans, etc., from J. W. Rader, County Engr., and County Clk (See Construction News—Road and Street Construction.)

Paving.—City, G. L. Lightsey, Clk., Laurel, Miss.—Bids until Dec. 30 to construct 24,392 sq. yds. brick pavement with concrete foundation; 7,674 lin. ft. concrete header; 4,564 lin. ft. concrete curb; plans, etc., on file. (See Construction News—Road and Street Construction.)

Paving.—City, W. O. Ward, Clk., Anniston, Ala.—Bids until Jan. 3 to construct 25,000 sq. yds. street paving; asphaltic concrete, bitulithic, brick or Tarvia penetration reconstructed slag base or Portland cement concrete; 26,000 lin. ft. combined curb and gutter; etc.; Robert L. Totten, Consit. Engr., Birmingham, Ala. (See Construction News—Road and Street Construction.)

Pipe.—Associate Reformed Presbyterian Assembly, E. C. Stuart, Prest., Tampa, Fla.—Terra cotta pipe. (See Construction News—Water-Works.)

Plumbers Supplies, etc. — Hastings Machine Co., Hastings, Fla.—Catalogs on new and second-hand plumbers tools, also steam fitters tools and supplies. (See Construction News—Motor Cars, Garages, Tires, etc.)

Pottery Machinery.—Box 283, Macon, Ga.—Data regarding mfre. of pottery and mchy. for making same of red and white clay.

Presses (Leather).—Wm. A. Burr, Tampico, Tames, Mexico.—Small presses for mfre. of pocket books, card cases, etc.; to utilize excessive production of pig skin.

Presses.—L. F. Seyfert's Sons, 437 N. 3rd St., Philadelphia, Pa.—Two No. 74½ straight side Bliss geared presses; one P-3 Ferracute press.

Pumping Outfit.—W. B. Greenlaw, Columbia, Tenn.—Small pumping outfit to supply water for private institutions.

Pumping Plant.—Belzoni Drainage Dist., C. E. Miller, Engr, Belzoni, Miss.—Pumping plant for reclamation of about 4000 acres land.

Pump (Duplex Fire).—W. V. Sullivan, 619 Call Bldg., San Francisco, Cal.—Underwriters duplex fire pump.

Rails.—Amherst Coal Co., Amherstdale, W. Va.—1800 lin. ft. 15 lb. ASCE relaying rails, with angle bars; subject to Hunt's inspection; state time of shipment, price delivered Amherstdale; immediate delivery.

Refrigeration Machinery.—Mullens Bottling Works, J. A. Radwan, Mgr., Mullens, W. Va.—Refrigeration Machinery. (See Construction News—Miscellaneous Factories.)

Rings (Leather) and Gaskets.—Newton Giant Incubator Corp., Harrisonburg, Va.—

Names and addresses mfrs. of leather rings and gaskets for packing.

Road Construction.—Gillespie County, A. H. Kuesse, County Judge, Fredericksburg, Tex.—Bids to construct State Aid Project No. 238 involving construction of 2.04 mi. gravel bituminous road on Highway No. 9 through town of Fredericksburg; 16,366.6 sq. yds. bituminous topping; bids opened Dec. 21; A. F. Moursand, County Engr. (See Construction News—Road and Street Construction.)

Road Construction.—Highway Dept. Board States Engrs., 332 Maison Blanche Annex, New Orleans, La.—Bids until Dec. 23 to construct 9.50 mi. Shreveport-Arkansas and 9.50 mi. Shreveport-Mansfield highways; Sections A and B; information on file. (See Construction News—Road and Street Construction.)

Road Construction.—Ky. State Highway Comsn., Frankfort, Ky.—Bids to construct 2.7 mi. surfacing in Meade County; waterbound macadam; cost $25,000; bids opened Dec. 21. (See Construction News—Road and Street Construction.)

Road Construction.—Ky. State Highway Comsn., Frankfort, Ky.—Bids to construct 3.6 mi. road in Fayette County; 18-ft. rock asphalt; cost $100,000; bids opened Dec. 21. (See Construction News—Road and Street Construction.)

Road Construction.—Ky. State Highway Comsn., Frankfort, Ky.—Bids to construct 8.4 mi. 16x20-ft. pavements in Greenup and Boyd Counties; cost $375,000; bids opened Dec. 21. (See Construction News—Road and 2.5 mi. 18-ft. pavement out of Paducah; rock asphalt; penetration; reinforced concrete; cost $70,000; bids opened Dec. 21. (See Construction News—Road and Street Construction.)

Road Construction.—Ky. State Highway Comsn., Frankfort, Ky.—Bids to grade and drain 7.8 mi. Mayo Trail in Boyd County; cost $100,000; bids opened Dec. 21. (See Construction News—Road and Street Construction.)

Road Construction.—State Road Dept., Tallahassee, Fla.—Bids until Jan. 5 to construct 8.954 mi. compact rock base and bituminous mcadam wearing surface on section of State Road No. 2, known as Federal Aid Project No. 13, in Orange County between Plymouth and Mount Dora; plans, etc., on file. (See Construction News—Road and Street Construction.)

Road Construction.—State Road Dept., Tallahassee, Fla.—Bids until Jan. 5 to construct 12.602 mi. compact rock base and bituminous macadam wearing surface on section tion of State Road No. 2 known as Federal Aid Project No. 33, in Alachua County between Burnetts Lake and Gainsville; alternate bids on cement concrete, sheet asphalt, rock asphalt, bituminous concrete and cement grouted brick; plans, etc., on file. (See Construction News—Road and Street Construction.)

Road Construction.—State Road Dept., Tallahassee, Fla.—Bids until Jan. 5 to construct 12.791 mi. compacted rock or shell base and bituminous macadam wearing surface on section of State Road No. 3, known as Federal Aid Project No. 18, located in Putnam County between Sisco and North Line of Volusia County; alternate bids on cement concrete, sheet asphalt, rock asphalt, bituminous concrete and cement grouted brick; plans, etc., on file. (See Construction News—Road and Street Construction.)

Road Construction.—State Road Dept., Tallahassee, Fla.—Bids until Jan. 5 to construct 19.239 mi. compacted rock base or shell base on section of State Road No. 3 in Volusia County between south line of Putnam county and De Leon Springs; 191,960 sq. yds.; plans, etc., on file. (See Construction News—Road and Street Construction.)

Road Construction.—State Road Dept., Tallahassee, Fla.—Bids until Jan. 4 to construct compacted rock base and bituminous macadam wearing surface on section of State Road No. 1 known as Federal Aid Projects No. 11, 21, and 23 in Baker, Duval and Nassau counties; alternate bids on cement concrete, sheet asphalt, rock asphalt, bituminous concrete and cement grouted brick; length of projects, Project 11, 15.4 mi.; Project 21, 5.68 mi.; Project 22, 8.90 mi.; Project 23, 12.80 mi.; plans, etc., on file. (See Construction News—Road and Street Construction.)

Roller (Steam).—I. A. Sims, 314 American Bank Bldg., Savannah, Ga.—Second-hand steam roller in good working condition, subject to Hunt & Co.'s inspection; state price f.o.b. Huntington, W. Va.

Roofing.—W. B. Wingate, Callahan, Fla.—See Building Material.

Safes.—Earl J. Smith, Eliasville, Tex.—Prices on safes for post office.

Scales (Health.)—Board of Awards, Wm. F. Broening, Prest., Baltimore, Md.—Bids until Dec. 21 to furnish and deliver health scales. C. Hampson Jones, Commr. of Health, City Hall Annex No. 1311 Courtland St.

School Equipment. — J. Gordon Jones, Chrmn. Bd. of Trustees, R. F. D. No. 1, Middleton, Ga.—School desks, blackboards, teachers' chairs, tables, etc. for 6-room school. (See Contract Awarded—Schools.)

Screen (Sand). — D. C. Elphinstone, 408 Continental Bldg, Baltimore, Md.—Second-hand revolving sand screen, 3-bins ¼ and 1-½ in.-100 to 200 tons capacity; must be located near Baltimore.

Seating.—E. E. Bevil, Bradford, Tenn.—Prices on 250 theater chairs.

Seating.—J. Gordon Jones, Chrmn. Bd. of Trustees, R. F. D. No. 1, Middleton, Ga.—See School Equipment.

Septic Tank.—Associate Reformed Presbyterian Assembly, E. C. Stuart, Prest., Tampa, Fla.—Septic tanks. (See Construction News—Sewer Construction.)

Sewers.—Board of Commrs., Mat Miser, Commr. of Streets and Sewers, Huntington, W. Va.—Bids until Dec. 29 to construct sewer in Staunton St.; plans, etc., from A. B. Maupin, City Engr. (See Construction News—Sewer Construction.)

Sewers.—City, Wm. Lynch, Mayor, Dawson Springs, Ky.—Bids until Apr. 1, 1922 to extend sewer system. (See Construction News—Sewer Construction.)

Screw Machine.—L. F. Seyfert s Sons, 437 N. 3rd St., Philadelphia, Pa.—No. 2A Warner & Swasey screw machine.

Shipping Cases.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C.—Corrugated shipping cases for medical preparations. (See Construction News—Miscellaneous Factories.)

Shovel (Automatic Power.)—Port of New Orleans Commrs., R. S. Hecht, Prest., 200 New Orleans Court Bldg., New Orleans, La.—Bids until Dec. 22 to furnish automatic power shovels and other equipment for use at coal handling plant.

Shovel (Steam).—Georgia Fullers Earth Co., D. W. Baily, Lumpkin, Ga.—Second-hand caterpillar tractor steam shovel, ¾ to 1 yd. dipper.

Signs.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C.—Road and window signs for medical preparations. (See Construction News—Miscellaneous Factories.)

Spark Plug Materials. — Self Cleaning Spark Plug Co., S. Walker, Mgr., 904 American National Bank Bldg., Wichita Falls, Tex.—Prices on material for mfre. of spark plugs including check valves of brass or bronze; porcelain insulators; spark plug shells; electrodes; copper gaskets; brass and compression nuts, etc.

Stamping (Check) Machines. — James Lawrence, 428 Willow Ave., Altoona, Pa.—Names and addresses mfrs. of machines to stamp aluminum checks.

Steel (Re-inforcing). — Georgia Fullers Earth Co., D. W. Baily, Lumpkin, Ga.—Concrete re-inforcing steel ½, ⅝ and ¾-in.

Tables.—J. Gordon Jones, Chrmn. Bd. of Trustees, R. F. D. No. 1, Middleton, Ga.—See School Equipment.

Tanks (Oil.)—M. M. Roche, Box 5, Mexia, Tex.—Prices f.o.b. on twenty 55,000 bbl. oil tanks, state time of shipment.

Tanks (Storage.)—J. Lloyd Abbot, Gen. Mgr., Horticultural Development Co., Mobile, Ala.—Tanks suitable for storing crude oil with parafine base, in quantities of 2, 3, 4 and 5000 gals.

Tank (Water).—Associate Reformed Presbyterian Assembly, E. C. Stuart, Prest., Tampa, Fla.—25,000-gal. water tank on 90-ft. tower. (See Construction News—Water-Works.)

Terra Cotta. — Parker & Rittenberry, Amarillo, Tex.—Samples of terra cotta.

Textile Mill Equipment. — C. B. Sutaria Brothers, Engineers & Commission Agts., Loonsawada P. O. Box 32, Ahmadabad, India.—Interested in roving and intermediate frames for textile mills.

Thread and Lace Making Machinery. — Wm. A. Burr, Tampico, Tames, Mexico.—Thread and lace making mchy., to be operated by hand preferred.

Tin Can Machinery. — Wm. A. Burr, Tampico, Tames, Mexico.—Machy. for making tin cans; simple and inexpensive.

Tubes (Aluminum).—Bars, etc.—Carl H. Jernagan, Box 233, Milton, Fla.—Names and addresses mfrs. of aluminum bars, sheets, tubes, etc., also making articles of aluminum sheets to order.

Valves. — Lamar Fontaine, Jr., Engr., Yazoo City, Miss.—Prices on 2 automatic valves, 8 ft. high and 16-ft. wide to be placed at mouth of two bayous in reinforced concrete spillways under the levee.

Woolen Mill Machinery.—J. E. Hillams, Muskogee, Okla.—Names and addresses mfrs. woolen mill machinery to make yarns and blankets.

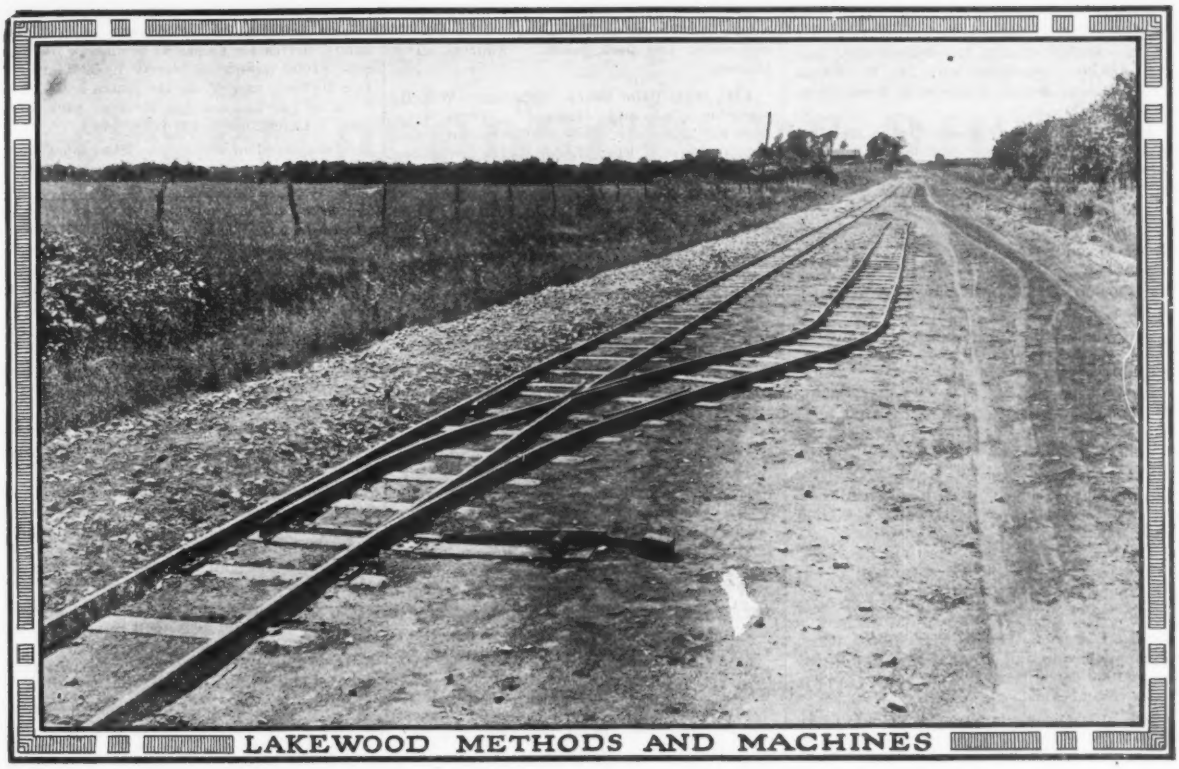
Wrappings.—Kuykendal Chemical Co., C. M. Kuykendal, Prest.-Treas., 724 Main St., Columbia, S. C.—Wrappings for medical preparations. (See Construction News—Miscellaneous Factories.)

Financial News

New Financial Corporations.

Ala., Mobile—State Savings Bank, capital $50,000 organized with J. B. Dortch, Prest.; E. S. Wall, Cashr.

Ark., Fort Smith—Commonwealth Life Assn., incptd. by M. M. Hayes, Hugh Branson.

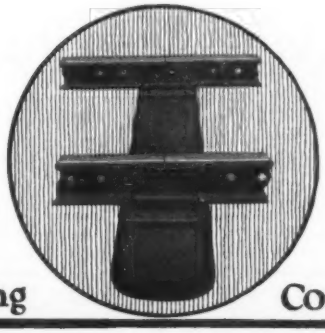


57 Contractors in 19 States Use Lakewood Track

In Pennsylvania alone over 20 miles of Lakewood road track was used on 14 of the largest road contracts in that state last year.

On Twohy Bros. contract in Arizona over 20 miles of Lakewood road track is giving satisfactory service.

The illustration shows the Chicago Heights Coal Co. job on a section of the Dixie Highway in Illinois.



The Lakewood Engineering Company, Cleveland U.S.A.

Fla., Jacksonville—Varn Investment Co., capital $100,000 organized with G. W. Varn,

Fla., Miami—Walsh Investment Co., capital $20,000, organized with W. E. Walsh, Prest., Miami Beach; Johnson H. Pace, Secy.-Treas., Miami.

Fla., Moore Haven—Moore Haven Building & Investment Co., capital $15,000 organized with J. J. Hendry, Prest.; D. W. Stevenson, Secy.-Treas. and Director.

Fla., Tampa—Bay Realty & Insurance Co., capital $15,000, incptd. by John A. Smith, Victor H. Knight.

Fla., Winter Haven—National Bank, capital $60,000 will organize with L. P. Kirkland, A. M. Klemm.

Ky., Louisville—American Mutual Savings Bank, capital $100,000, incptd. by J. L. V. Washington, A. B. Ridley.

Okla., Chandler—Farmers National Bank, conversion of First State Bank, capital $25,000 chartered with A. E. Patrick, Prest.; W. R. Curry, Cashr.

Tenn., Jackson—American Life & Casualty Co., capital $100,000, organized with Thos. I. Taylor, Prest.; W. N. Mynatt, V.-P. and Gen. Mgr.

New Securities.

Ala., Bessemer—Sewer—City, B. C. Jones, Mayor will vote Jan. 16 on $50,000 of 6 per-cent $1000 denomination sewer bonds. (Supersedes recent item.)

Ark., Clarendon—Levee—Clarendon Levee Dist., Monroe County receives bids Dec. 15 on 6 per-cent serial 20-yr. Levee Dist. bonds; C. A. Wilburn, Secy.

Ark., Fayetteville—Street—East Street Improvement Dist. sold $26,282 street bonds to, Southern Trust Co., Little Rock, Ark.; 7 per-cent 1 to 10-yr.

Ark., Morrillton—Street—City will sell 6 per-cent street bonds; J. J. Scroggin, City Commr.

Ark., Newport—Levee—Newport Levee Dist. sold $100,000 of 6 per-cent levee bonds to M. W. Elkins & Co., Little Rock, Ark.

Fla., Bushnell—Paving—City plans selling about $30,000 paving bonds. Address The Mayor.

Fla., Fort Meade—Street—City, Mayor Nat J. Patterson contemplates issuing about $30,000 street bonds.

Fla., Fort Meyers—Road—Lee County proposes to issue $1,500,000 road bonds. Address County Commrs.

Fla., Lake Wales—Street—City, M. R. Anderson, Mayor will receive bids until Jan. 31 on $200,000 of 6 per-cent $500 denomination street bonds, dated Jan. 1, 1922. (Lately noted voting bonds.)

Fla., Orlando — School — Orlando School Dist. sold $300,000 school bonds to, Bulger. Mosser & Willimon, Chicago, Ill., at $99.50.

Fla., Tallahassee—Drainage—Spitzer, Rorick & Co., New York, purchased and are offering to investors $1,000,000 of 6 per-cent $1000 denomination Everglades Drainage Dist. bonds, dated Jan. 1, 1921.

Fla., Tampa—Road—Hillsboro County contemplates issuing $3,000,000 road bonds. Address County Commrs.

Fla., Tavares—Road—East Lake County Special Road and Bridge Dist., T. C. Smyth, Clk. County Commrs. will receive bids until Dec. 28 on $600,000 of 5 per-cent semi-annual $1000 denomination road and bridge bonds, dated July 1, 1921. (Supersedes recent item.)

Fla., Vero—Drainage—Indian River Farms Drainage Dist., A. W. Young, Secy. will sell $600,000 drainage bonds.

Fla., Wauchula—Street, Water and Park—City plans voting on $70,000 street and $10,000 water and park bonds. Address The Mayor.

Fla., West Palm Beach—Drainage—Wm. R. Compton Co., and Mercantile Trust Co.; both St. Louis are offering $650,000 of Palm Beach County, Fla., Lake Worth Drainage Dist. 6 per-cent bonds. (Previously noted.)

Fla., Williston—Water and Electric—City will vote Dec. 28 on $35,000 water and electric bonds; F. F. Capps, Mayor.

Ga., Atlanta—State, Thos. W. Hardwick, Governor sold $2,690,000 Western & Atlantic R. R. assignment rental warrants to, Citizens & Southern Bank of Atlanta, on 5.95 discount basis. (Lately noted inviting bids.)

Ga., Cedartown—School, Sewer and Street—City, J. C. Walker, Clk. sold $50,000 school, $55,000 sewer and $58,000 street improvement bonds to Robinson-Humphrey Co., Atlanta, Ga., at $173,204. (Lately noted inviting bids.)

Ga., Pitts—School—T. M. Cook, Cashr. Bank of Abbeville, Ga. sold $30,000 Pitts School Dist. bonds.

Ga., Quitman—School—Brooks County sold $30,000 school bonds. Address Board of Education.

Ga., Rome—Road—Floyd County sold $270,000 road bonds to, Robinson-Humphries & Co., Atlanta, Ga., at par and accrued interest; these are part of $750,000 bond issue to be sold.

Ky., Ashland—Road and Bridge—Boyd County Court, W. L. Watson, Special Commr. receives bids Dec. 19 on $55,000 of 5 per-cent semi-annual $1000 denomination road and bridge bonds, dated Dec. 15, 1921.

Ky., Falmouth—Public Utility—City sold $15,000 of 6 per-cent 16 1/6 yr. public utility bonds to, First National Bank, at 102.53.

Ky., Louisville—Sewer—City sold $1,000,000 of 4½ per-cent sewer bonds to R. M. Grant & Co., Chicago, Ill., and J. J. B. Hilliard & Son, Louisville, Ky.; semi-annual $1000 denomination, dated Feb. 1, 1920. (Supersedes recent item.)

Ky., Paducah—Hospital—City, Wynn Tully, Commr. Public Finance voted $60,000 Riverside Hospital bonds. (Previously noted.)

La., Crowley—School—M. W. Elkins & Co., Little Rock, Ark. purchased $50,000 school bonds at accrued interest and $75 premium.

La., Jennings—John T. Hood, Clk. Jefferson Davis Parish Police Jury will receive bids until Jan. 5 on $166,000 of 5 per-cent semi-annual bonds.

La., Oberlin—Road—Allen Parish, A. E. Darbonne, Clk. Police Jury will receive bids until Jan. 26 on $60,000 of 5 per-cent $1000 denomination 1-20-yr. road bonds, dated Oct. 1, 1919.

Md., Cumberland—Improvement—John J. Stump, Commr. Finance will receive bids until Dec. 30 on $250,000 of 5 per-cent $1000 denomination general improvement bonds, dated July 1, 1920.

Md., Cumberland—School—Allegany County Commrs., Thos. P. Richards, Clk. will receive bids until Jan. 12 on $350,000 of 5 per-cent $100, $500 or $1000 denomination semi-annual school bonds.

Md., Hagerstown—Sewer—Cty, Wm. Logan, Tax Collector will receive bids until Jan. 3 on $310,000 of 5 per-cent semi-annual 32 ¾ yr. sewerage system and disposal system plant bonds.

Miss., Aberdeen—School—Monroe County Supvrs., Joe T Morgan, Clk. will receive bids until Jan. 2 on $6000 Barttahatchie Consolidated School Dist. bonds; 6 per-cent semi-annual $300 denomination, dated Nov. 1, 1921.

Miss., Jackson — Improvement — State Comsn. sold $1,500,000 State Improvement bonds, Series K, L, M, N, O and P, 5½ per-cent $1000 denomination to, I. B. Tigrett & Co., Jackson, and W. A. Harriman & Co., New York, at par and accrued interest, plus premium. (Lately noted inviting bids.)

Miss., Mendenhall—Road—Simpson County voted road bonds of Separate Road Dist. Address County Commrs.

Miss., Vicksburg—Bridge—Warren County will vote on $150,000 bridge bonds. Address Highway Comsn.

Miss., Yazoo City—Road—Yazoo County Separate Road Dist. No. 5 will vote Dec. 20 on $25,000 road bonds. Address Supvrs.

Mo., Albany—Drainage—Whitaker & Co., St. Louis, Mo. purchased $189,000 of 6 per-cent semi-annual $1000 denomination Gentry County Drainage Dist. bonds, dated Nov. 1, 1921.

Mo., Jefferson City—Bridge and Canal—City, Paul C. Hunt, Mayor plans voting on $80,587.99 bridge and canal bonds.

Mo., Kennett—Road—Dunklin County sold $1,100,000 road bonds to, Liberty-Central Trust Co., Whitaker & Co., Mississippi Valley Trust Co., Smith-Moore & Co., and Lewis W. Thomson & Co.; all St. Louis, Mo. (Supersedes recent item.)

N. C., Biltmore—Water, Light and Sewer—Town, F. W. Kenny, Clk. will receive bids until Dec. 23 on $20,000 of 6 per-cent water, light and sewer bonds, dated Dec. 1, 1921. (Lately noted.)

N. C., Carthage — Courthouse — Moore County Commrs. will receive bids until Jan. 9 on $150,000 of 6 per-cent semi-annual courthouse bonds, dated Dec. 1, 1921; E. C. Matheson, Register of Deeds.

N. C., Elizabethtown—School — Bladen County Board of Education, E. J. Cromartie, Clk. will receive bids until Jan. 9 on $56,000 school bonds including $25,000 Brown Marsh Township School Dist., $15,000 Elizabethtown High School Dist., $10,000 Frenches Creek Township School Dist., and $6000 White Oak High School Dist.; 6 per-cent semi-annual $1000 denomination, dated Jan. 1, 1922.

N. C., High Point—Municipal Building—City will issue $250,000 municipal building bonds. Address The Mayor.

N. C., Marion—Road—McDowell County sold $150,000 of 6 per-cent road bonds to, Sidney-Spitzer & Co., Toledo, O. at 100.046. (Lately noted inviting bids.)

N. C., Pilot Mountain—Electric and School—City, J. F. Kirkman, Mayor voted $40,000 electric and $25,000 school bonds. (Previously noted to vote.)

N. C., Raleigh—School—Raleigh Township plans voting on $1,500,000 school bonds. Address Board of Education.

N. C., Reidsville—School—School Committee, W. S. Somers, Secy. will receive bids until Dec. 23 on $300,000 of 6 per-cent $1000 denomination school bonds.

N. C., Scotland Neck—Street—Town, Henry T. Clark, Clk. plans issuing $100,000 street bonds.

N. C., Shelby—Road—Cleveland County sold $50,000 Road Dist. No. 9 bonds to, W. L. Slayton & Co., Toledo, O., at par and accrued interest.

N. C., Southern Pines—Street, School, Water, Sewer, Etc.—Town, Mayor Richardson plans issuing about $175,000 bonds including $50,000 school, $20,000 floating indebtedness, $25,000 sewer and water, $50,000 street, $25,000 other bonds.

N. C., Warsaw—Water and Light—Town will sell $25,000 water and light bonds. Address The Mayor.

STEEL PRODUCTS BY RIVER

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N. C., Wentworth—Road and Bridge—Rockingham County Commrs., Wade H. Gentry, Register of Deeds, Reidsville, N. C. will receive bids until Dec. 23 on $400,000 of 6 per-cent $1000 denomination road and bridge bonds, dated Jan. 1, 1922.

N. C., Wilkesboro—Road—Wilkes County sold $275,000 road bonds to, Bank of Northwilkesboro, Wilkesboro, N. C. (Lately noted.)

N. C., Wilmington—Refunding and Street—City, Thos. D. Meares, Clk. and Treas. sold $300,000 refunding and $200,000 street bonds to, Wilmington Savings & Trust Co., at par, 5 per-cent interest and premium of $1350. (Lately noted inviting bids.)

N. C., Wilson—Auditorium—Wilson County, Stantonsburg Township, plans to issue $25,000 auditorium bonds. Address County Commrs.

N. C., Yanceyville—Highway — Caswell County Highway Comsn., T. J. Henderson, Secy. receives bids Dec. 22 on $200,000 of 6 per-cent $1000 denomination highway bonds, dated Jan. 1, 1922.

Okla., Burbank—School—Board of Education voted $20,000 school bonds.

Okla., Frederick—School—Frederick School Dist. voted $150,000 school bonds. Address Board of Education. (Lately noted.)

Okla., Granite—Gas—Town plans voting on gas plant bonds. Address The Mayor.

Okla., Marietta—Funding—Love County sold $73,000 of 6 per-cent 20-yr. funding bonds to Geo. W. & J. E. Piersol, Oklahoma City, at 90.

Okla., McAlester—Road—Pittsburg County voted $750,000 road bonds. Address County Commrs. (Lately noted to vote.)

Okla, Mill Creek—Water—City voted $50,000 water bonds. Address The Mayor.

Okla., Poteau—Road—Leflore County Commrs. sold $800,000 road bonds to, A. J. McMahan and R. J. Edwards, Oklahoma City, for accrued interest to date of delivery and premium of $1000; the sale is conditional upon the bonds to be voted on Dec. 29. (Lately noted.)

Okla., Pryor—Bridge—Mayes County Commrs. plans selling $40,000 bridge bonds.

Okla., Wagoner—Road—Wagoner County Commrs. will sell $199,000 road bonds in Porter, Tallahassee and Gatesville Townships.

Okla., Watonga—Electric and Sewer—City sold $60,000 electric light system and $20,000 sewer system bonds to, Green Engineering Co., Oklahoma City.

Okla., Woodward—Electric Light—City voted $100,000 electric light plant and equipment bonds. Address The Mayor.

S. C., Belton—School—Belton School Dist. No. 12, W. R. Haynie, Chrmn. Board Trustees voted $50,000 school bonds. (Lately noted to vote.)

S. C., Greenville—Water and Sewer—City, Mayor S. C. Harvley sold $200,000 water and street bonds to, Trust Co. of Georgia, Atlanta, Ga., at par and accrued interest; these bonds were voted last January.

S. C., Laurens—Street and Sewer—City, Jno. A. Franks, Mayor will receive bids until Jan. 2 on $35,000 of 5½ per-cent semi-annual 20-yr. $1000 denomination street bonds, dated Jan. 1, 1922, and $20,000 of 5½ per-cent semi-annual 30-yr. $1000 denomination, dated Jan. 1, 1922.

S. C., Seneca—Water and Sewer—City sold $160,000 of 6 per-cent 20-40-yr. water and sewer bonds to, J. B. McCrary Co., at par.

S. C., Spartanburg—Road—Spartanburg County, J. L. Vernon, Supvr. sold $137,000 of 5 per-cent semi-annual $1000 denomination highway bonds, dated April 1, 1921, at par and premium of $1,749.49. (Lately noted inviting bids.)

Tenn., Algood—School—Board of Education sold $30,000 school bonds recently voted.

Tenn., Huntington—Highway—I. B. Tigrett & Co., Jackson, Tenn. purchased $115,000 Carroll County, Tenn. highway bonds. (Supersedes recent item.)

Tenn., Jackson—Funding—Madison County sold $125,000 of 6 per-cent funding bonds offered unsuccessfully on May 25 to, National Bank of Commerce, St. Louis, Mo. at par.

Tenn., Knoxville—Street—City, John M. Brooks, Mayor sold $61,000 street bonds to, City National Bank for par, accrued interest and a premium of $10,000. (Lately noted.)

Tenn., Livingston—Street—B. H. Hunt, Mayor receives bids Dec. 20 on $25,000 of 6 per-cent semi-annual $500 denomination street bonds.

Tenn., Rutledge — Highway — Grainger County reported to have sold $35,000 of 6 per-cent highway bonds. Address County Commrs.

Tenn., Sevierville—Street—City voted $75,000 of 6 per-cent semi-annual $1000 denomination street bonds. Address The Mayor. (Lately noted to vote.)

Tex., Albany—Water—Attorney General, Austin, Tex. approved $100,000 City water bonds; these bonds were voted on Sept. 12. (Previously noted voting.)

Tex., Alice—Road and Bridge—Jim Wells County contemplates voting on $600,000 road and bridge bonds. Address County Commrs.

Tex., Brenham—Street—City sold $40,000 street bonds to, Howard Bell Wood, at par with accrued interest and $10 premium. (Lately noted inviting bids.)

Tex., Corpus Christi—Water and Irrigation—Nueces County Water Improvement Dist. No. 3 voted $300,000 improvement bonds. (Previously noted to vote.)

Tex., Dallas—Levee—Bois D'Arc Island Levee Improvement Dist. voted Dec. 14 on $225,000 additional bonds. Address County Commrs (Lately noted.)

Tex., Decatur—Road—Breg, Garrett Co., 1201 Praetorian Bldg., Dallas, Tex., purchased $150,000 of 5½ per-cent Wise County Road Dist. No. 2 road bonds, dated Oct. 10, 1921, maturing serially 1 to 30-yrs.

Tex., Decatur—Water and Sewer—Breg, Garrett Co., 1201 Praetorian Bldg., Dallas, Tex. purchased $175,000 of 6 per-cent water and sewer bonds, maturing serially 1 to 40-yrs. (Lately noted.)

Tex., Farwell—Road and Bridge—J. L. Arlitt, Austin, Tex. purchased $15,000 Parmer County 7 per-cent road and bridge warrants, dated Oct. 11, 1920.

Tex., Ferris—Waterworks—City sold $55,000 of 6 per-cent water bonds. Address The Mayor.

Tex., Fredericksburg—School — Attorney General, Austin, Tex. approved $75,000 of 6 per-cent serial Fredericksburg Independent School Dist. bonds.

Tex., George West—Road—Live Oak County plans voting in January on road bonds. Address County Commrs.

Tex., Handley—School—Breg, Garrett Co., 1201 Praetorian Bldg., Dallas, Tex. purchased $50,000 Handley Independent School Dist. bonds, dated April 30, 1921, maturing 40-yrs. with 10-yr. option.

Tex., Hemphill—School—J. L. Arlitt, Austin, Tex. purchased $15,000 Hemphill Independent School bonds; 5 per-cent, dated July 15, 1920.

Tex., Kerrville—Road—Kerr County, Lee Wallace, Judge will sell $163,500 Road Dist. No. 1 bonds.

Va., Lynchburg—School—City sold $300,000 of 5 per-cent 34-yr. school bonds to Harris, Forbes & Co., New York, at $103.451.

Tex., Marlin—Road—Falls County Commrs. Court sold $150,000 of 5 per-cent semi-annual 30-yr. road bonds of Precinct No. 5, dated April 15, 1919 to Mr. Bowman, Austin, Tex., at 85. (Lately noted inviting bids.)

Tex., Paris—Water—City sold $1,000,000 water bonds to, Halsey, Stewart & Co., Chicago, Ill., and Mortgage Trust Co., St. Louis, Mo., at par and accrued interest.

Tex., Robstown—Street and Sewer—City will vote on about $80,000 street and sewerage system bonds. Address The Mayor.

Tex., Slaton—Water and Sewer—City sold $55,000 sewer and $35,000 water bonds to, Winslett-Eldridge Co., Dallas, Tex. at par.

Tex., Stamford—Water—Attorney General, Austin, Tex. approved $125,000 City of Stamford 5½ per-cent serial water bonds. (Lately noted.)

Tex., Texline—School—International Trust Co., Denver, Col. purchased $100,000 or 6 per-cent school bonds of Texline Independent School Dist.

Tex., Vernon—Electric—City will vote Jan. 3 on $100,000 electric bonds; Harry Mason, Mayor. (Lately noted.)

Tex., Waxahachie—Road—Breg, Garrett Co., Dallas, Tex. purchased $60,000 Ellis County 5½ per-cent Road Dist. bonds, maturing serially from 1923 to 1930 inclusive.

Va., Portsmouth—Road—Norfolk County Supvrs. authorized sale of $259,000 of 5 per-cent 20-yr. road bonds; also will approve additional issue of $250,000 road bonds.

Va., Potomac—Sewer—City, John W. Varney, Mayor will receive bids until Dec. 28 on $60,000 of 6 per-cent sewer bonds.

Va., Richmond—Sewer, School & Gas—City Committee on Finance, 314 City Hall receives bids Dec. 20 on $750,000 sewer, $500,000 ,school and $250,000 gas work bonds; 5 per-cent semi-annual $1000 denomination, dated Jan. 1, 1922; Barton H. Grundy, Chrmn.

Financial Notes.

Third National Bank, Columbus, Ga. may increase capital to $1,000,000.

Book Review.

Coal Manual for Salesmen, Buyers, and Users. By F. R. Wadleigh. Cincinnati: National Coal Mining News. 1921. Pp. 184.

This very practical and exceedingly interesting little volume, highly valuable to the classes of folk it is intended to provide with accurate elementary information regarding the origin, structure, chemistry and uses of coal, will be widely appreciated. It is written in a non-technical style, everything being presented so as to be readily comprehended. Coal mining is not described, but the coal fields of the world and their production are duly considered. Other matters treated in the ten chapters which compose the book include analysis of purchases, samples, uses of coal in different ways and the methods to obtain the best results, both bituminous and anthacite coals being discussed, the production and use of coke, burning of coal in different types of furnaces and under boilers, the storage of coal and discussion of spontaneous combustion, etc. The author is a member of the American Institute Mining & Metallurgical Engineers and also of the American Society for Testing Materials. He is now chief of the Fuel Department, Bureau of Foreign and Domestic Commerce, Washington, D. C.

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INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Annual Meeting in Pittsburgh.

The nominating committee of the American Statistical Association have prepared the following ticket to be voted on at the annual meeting December 29 in Pittsburgh: Prest., W. S. Rossiter; V. Ps., L. I. Dublin, E. W. Kemmerer, M. C. Rorty; Counsellors, C. W. Doten, W. C. Mitchell, W. F. Wilcox; Secy.-Treas., R. E. Chaddock; Librarian, H. L. Wheeler; Editor, W. F. Ogburn. Headquarters will be at the Wm. Penn Hotel.

Branch in Mexia Oil Region.

To meet the needs of the Mexia, Texas, oil fields the W. K. Henderson Iron Works & Supply Co., of Shreveport, La., has established a branch office and warehouse in that section, with a full line of oil field supplies for instant delivery. The Henderson organization is well known in the several oil fields because of its many years of manufacture of a complete line of supplies for the oil industry.

In New and Larger Quarters.

The O'Brien Machinery Co. now occupy their new offices and show rooms at 113 North Third St., Philadelphia, Pa.; their former location was at No 119 on the same street. This concern was formed six years ago by Frank L. O'Brien and Clarence J. O'Brien, brothers, to deal in both new and used power equipment and machinery for modern machine shops, and their business has grown so that it became necessary to obtain more space, which they secured by purchasing the five story building in which they are now located, and which they have extensively improved. Their warehouses will be retained, in addition to this building, to accommodate large and heavy machinery.

Large Sale of Shipyard Property.

In another column appears the formal and detailed announcement of an important auction sale that will take place on January 11, 12, 13, and 14, at the yards of the Doullut & Williams Shipbuilding Co. Inc., New Orleans, La. It will include a number of new steel oil barges, locomotive cranes, portable ship cranes, air compressors, pile drivers, hoisting engines and boilers, steam hammers, metal and wood working machinery, motors, overhead and jib cranes, steel tower and tanks, welding machines, etc. The variety of machinery is extensive comprising drills, millers, drill presses, threaders and tappers, planers, lathes, pipe machines, punches, shears, etc. etc. A large amount of material, both wood and metal, will also be sold, besides ship chandlery, automobiles, office, hospital and cafeteria equipments and numerous other things. Finally buildings and improvements will be sold. Further particulars will be found in the announcement.

To Make Concrete Accurately.

Nathan O. Johnson, a well known authority on concrete, is the inventor of the Lakewood-Johnson "Proportioner," a new device for measuring concrete batches and which is made by the Lakewood Engineering Co., Cleveland, Ohio. Its use, it is stated, results in more uniform and stronger concrete, besides effecting saving as to men and time. Two of the new machines are already in use by the Parklap Construction Co. at the Sherman Island hydroelectric development on the Hudson River for the International Paper Co. One of the causes for varying strength of concrete is the irregularity in quantities of fine materials delivered by volume measurement, even with laboratory apparatus, says a statement relating to this new machine. In the field quantities are even more uncertain and may be 10 to 12 per cent less than they appear. The "Proportioner" overcomes these difficulties by measuring by weight instead of by volume and only one man is necessary to operate both it and a concrete mixer. The error per one yard batch will rarely exceed 50 pounds.

Sale of Coal Mine Property.

At 2 o'clock P. M. December 30 the coal plant and leasehold of the Perkins Coal Company will be offered for sale to the highest and best bidder for cash, according to announcement in full in another column. The sale will take place on the premises at or near Lex postoffice in McDowell County, W. Va., and it includes mining equipment, miners dwellings, etc., all being on the western side of Dry Fork of Tug River. B. Hampton Gray, trustee in bankruptcy, Welch, W. Va., can give further information if desired.

Tile Back at Pre-War Prices.

The recent striking announcement of the Southern Mosaic Tile Co., of Atlanta, Ga., of "Tile at prewar prices" attracted wide attention to the progressive action that it represents and its inspiration and encouragement to builders. It appears that during the world war the tile industry was hard hit and plants were unable to run at more than 40 per cent of capacity, yet in that trying time they did their best, shipping orders for buildings under construction, leaving stock orders unfilled, as the demand for tile was enormous, and while the prices of marble and similar products which could be used instead of tile advanced over 200 per cent, it is stated, the price of tile was advanced only some 40 per cent. Now that the factories are able to obtain labor and notwithstanding that "both labor and raw material are costing them more than before the war," according to the Southern Mosaic Tile Co., "they have voluntarily reduced their prices, with the idea of encouraging the use of tile as well as the construction of homes, schools, etc."

Trade Literature

Piston Rings Which Prevent Leakage.

The "Ever Tyte" Piston Ring division of the Walter A. Zelnicker Supply Co., St. Louis, Mo., has issued "Volume Eleven of Evidence Booklets," containing testimonial letters, reproduced in fac-simile, of companies that have used these piston rings for pumps, air compressors, locomotives, gas engines, etc. While the manufacturers claim unexcelled service for these rings they also present proof of their utility from companies which have had practical experience with them. "It's what the user says that counts!" is the slogan. And the latest booklet is, if possible, even stronger and more convincing that any. The "Ever-Tyte" piston ring expands from three points, thereby retaining a true circular form, and it possesses a right-angle interlock which prevents the three members separating and wearing independent seats in groove, thus guarding against leakage. The rings are also made for use in automobiles and auto-trucks, in all sizes. The booklets are sent free to everyone interested who may ask for them.

Welding Torch and Carrying Case Outfit.

A pocket size bulletin issued by the Davis-Bournonville Company, Jersey City, N. J., illustrates and describes their welding torch and carrying case outfit for use in garages and small machine shops. This is a very complete and convenient combination, easy to carry about, and enabling a workman to accomplish a speedy job without a large outfit.

Valves, Governors and Other Products.

Products of the Atlas Valve Company, 282 South Street, Newark, N. J., are described and illustrated in their 20 page Junior Catalog No. 21, which covers the Ideal and Victor reducing valves, pump governors, pressure regulators, hot water tank regulators, control valves and damper regulators. The information presented is complete and includes lists of all sizes and prices. A copy will be sent free on request.

Iron and Steel Calendar.

The Youngstown Sheet & Tube Company, Youngstown, Ohio, is making arrangements to distribute its calendar for 1922 containing twelve two-color illustrations of 8 by 15 inches and showing important operations in the manufacture of iron and steel. The company will send a copy to anyone who will enclose six cents in stamps to cover expense of mailing. It is noted that the calendar costs the company about 40 cents a copy.

Power Machinery for Textile Mills.

The Allis-Chalmers Manufacturing Company, Milwaukee, Wis., have issued a special catalog about their power equipment for textile mills which includes power equipments of every type as well as auxiliary electrical apparatus, a full line of textile motors for either group or individual drive, centrifugal pumps, transmission machinery, etc. These motors, it is stated, are built especially for driving textile machinery, having characteristics suited to the driven machines. They can be furnished to meet requirements. Special motors for individual drive include those for looms, spinning frames, twisters, pickers, openers, breakers, etc. The book contains numerous illustrations of this make of machinery installed in various textile establishments in the South, as well as in other parts of the country.

Hotel and Restaurant Equipment, Etc.

Catalog KA-24 of Albert Pick & Company, Chicago, is a large publication of 328 pages covering their complete line of furnishings, equipment and supplies for public service. It contains descriptions, pictures and prices of the extensive variety of articles used in hotels, apartment houses, clubs, hospitals and other institutions. restaurants, kitchens, school and industrial lunch rooms, soda water establishments, billiard halls, bowling alleys, barber shops, and other places catering to the needs and requirements of the public. Besides being manufacturers and sellers of equipment, furnishings and supplies made expressly to withstand the constant wear and tear of public service the firm are specialists on equipment and furnishing. They have a planning, consulting and engineering organization that is very extensive and which provides for the handling of everything from interior decorations to kitchen equipment. The cover of this catalog is printed in two harmonious colors.

Following Blind Leaders of the Blind.

LEWIS H. NASH, President Nash Engineering Co., South Norwalk, Conn.

I have taken pleasure in reading the letter from a country bank in Georgia in a recent issue of your publication, and would like to make a suggestion in answer to these questions. We all know the facts as set forth by your writer. They may be summed up in a sentence.

Under our present state of business methods, it costs more to get the goods from the producer to the consumer than it does to produce the goods.

This is true not only of farm produce, but everything else. As a matter of fact, efficiency in production, whether a manufactured article or a farm product, has been carried to a far higher degree of perfection than the means of distribution.

The problem before the country is to facilitate methods of distribution. Unfortunately all our legislation has been directed by the wrong motives. The attempt has been to penalize the wrong-doer. This has practically destroyed competition and obstructed co-operation. The efforts of legislation should be directed toward building up a fair competition and facilitating every means of transportation and distribution.

If this is done, the profiteer will no longer control our market because if he is making more than a fair amount, some one else will compete with him. If we can take away all legislation which prevents competition, the profiteer will disappear. But the people are following "Blind leaders of the Blind."

We hear of the Farmer Bloc, the Labor Bloc, the Capital Bloc, etc., etc. Each seeking its own and opposing the other. When we can cure that mental disease, we shall have prosperity for all.

German People Well Fed, Well Clothed and Pushing Their Trade.

New Orleans, La., Dec. 16—[Special.]—The German cotton situation holds considerable encouragement out to the American, in the opinion of H. J. Dreher, vice-president of the New Orleans Federal International Bank, who has spent several months on the continent studying conditions.

"Cotton firms on the continent," he said, "are doing a large business. German mills are running to about 60 per cent capacity. German goods can compete on more than equal terms anywhere, particularly in Central Europe, where cotton goods find their largest outlet. German mills are using low grade cotton, and any increase in German spinning capacity would aid the American cotton situation.

"Spinners are buying for cash. Little credit is being asked by them or given to them. Cotton firms are largely financed by American exporters. This enables the cotton firms to class out the cotton and usually deliver it to the spinners without any financial burden.

"In money terms, of course, Germany is poorly off, but money is not the proper measure. Living costs are extremely low. The people are well fed and well clothed. Germany is working hard. The number of unemployed is extremely small and grows less with each month. Plans are ceaseless for the extension of German trade."

PROPOSALS

BOND ISSUES BUILDINGS PAVING GOOD ROADS

Bids close Jan. 20, 1922.

U. S. Engineer Office, Mobile, Ala., Dec. 12, 1921. Sealed proposals will be received here until 11 o'clock A.M. January 20, 1922, and then opened for dredge pontoon catamarans with discharge pipe for the U. S. 20-inch hydraulic dredge Wahalak. Further information on application.

Bids close January 9, 1922.

$240,000 5½% Road Bonds

Karnes County, Texas.

Sealed proposals addressed to D. O. Klingemann, County Judge, for the purchase of $240,000.00 of Road Bonds of District No. 4, Karnes County, will be received at the office of Robt. G. Robuck, County Clerk, at Karnes City, Texas, until eleven o'clock, A. M., January 9, 1922, and then publicly opened and read.

The bonds, for road improvement, are serial bonds, one to thirty years, of $1,000.00 denomination, and bear interest at the rate of (5½) five and one half per cent payable semi-annually.

Further information may be obtained from O. N. Powell, Highway Engineer, Kenedy, Texas.

A certified, or cashiers, check for Ten Thousand Dollars ($10,000.00) made payable, without recourse, to the order of D. C. Klingemann, County Judge of Karnes County, must accompany each proposal as a guarantee that the bidder, if successful will complete the purchase of the bonds. The right is reserved by the party of the first part to reject any or all bids or to waive technicalities.

Proposals shall be submitted in sealed envelopes and marked "Bids for Bonds, Road District No. 4."

ROBT. G. ROBUCK,
County Clerk.

Bids close January 4, 1922.

Road Construction

Tallahassee, Fla.

Sealed proposals will be received by the State Road Department of Florida at its office in Tallahassee, Florida until 4 o'clock P.M. on the fourth day of January 1922 for the construction of a compacted rock base and a bituminous macadam wearing surface on a section of State Road No. 1 known as Federal Aid Projects Nos.11-21-22-23 in Baker, Duval and Nassau Counties between the west end of present brick road in Duval County and the East Line of Columbia County.

Alternate bids will be received on Cement Concrete Sheet Asphalt, Rock Asphalt, Bituminous Concrete and Cement Grouted Brick.

Approximate Total Quantities are as follows:

Compacted Rock Base	426,629 sq. yds.
Wearing Surface	401,534 " "
6" x 12" Concrete Curb	451,767 Lin. Ft.
Cement Grouted Brick to be laid in 1½" mortar on a sand Base.	

Curb to be used only in Conjunction with cement grouted brick pavement.

Net length of Projects being as follows:

Project 11—15.4 miles
" 21— 5.68 "
" 22— 8.90 "
" 23—12.80 "

Plans and specifications may be obtained on application to the State Road Department at Tallahassee, Florida for the sum of three dollars, or may be examined at the office of the Division Engineer at Lake City, Florida.

A certified Check or bidders bond executed by some reputable bonding company authorized to do business in the State of Florida in the Sum of Twelve hundred and fifty dollars ($1250.) per mile made payable to H. B. Philips, Chairman of the State Road Department must be submitted with each proposal.

Bidders may submit proposals on each project separately or on the combined projects as a whole.

The right is reserved to choose the type of surface for each Project, and to reject any or all bids.

H. B. PHILIPS,
Chairman.

Chas. A. Browne,
State Highway Engineer.
This 3rd day of December 1921.

Bids close January 10, 1922.

$125,000 6% Water Works Bonds, and $30,000 6% Street Paving and Water Main Extension Bonds

Palatka, Florida.

Notice is hereby given that sealed bids for the purchase of $125,000.00 six per cent Water Works Bonds, issue of 1921, of the City of Palatka, and $30,000.00 six per cent bonds of the City of Palatka, known as Heights Improvement Bonds for street paving and water and fire main extensions, will be received by the City of Palatka at the office of the City Clerk, at Palatka, Florida, up to eight o'clock P. M. Tuesday, January 10, 1922.

All of said bonds to be issued in denomination of $1000.00 each, and payable in periods of 10, 20 and 30 years from date, with interest payable semi annually on June 1 and December 1 of each year, bonds to be dated December 1, 1921.

The said bonds will be sold either in whole or in part to such bidder or bidders bidding therefor as will bring to the City of Palatka the highest price for said bonds. The right is hereby reserved to reject any and all bids. No bid will be considered unless a certified check for $500.00 accompanies such bid.

For further particulars address the undersigned.

CHAS. BURT,
Clerk of the City Council of the City of Palatka.

Bids close January 12, 1922.

$350,000 5% School Bonds

Cumberland, Md.

Sealed bids will be received by the County Commissioners of Allegany County, Maryland, at their office in the court house, Cumberland, Maryland, until 11 a.m., January 12, 1922, for an issue of Allegany County Bonds known as "Allegany County School Bond Issue of 1921," amounting to three hundred and fifty thousand dollars ($350,000.00).

Bids may be for part or all of the issue. Certified check for five per cent. of the amount bid must be deposited with any bid for said bonds as security for compliance with bid.

The bonds are authorized by Chapter 190 of the acts of 1920, and bear interest at the rate of five per cent. per annum, and will be issued in denominations of $100, $500, or $1000 each, purchaser to decide, and payable $35,000 on the first day of July 1937, and $35,000 on the first day of July biennially thereafter until all of the said bonds have been redeemed. The last payment falling due and payable on the first day of July, 1955.

Interest payable semi-annually represented by interest coupons attached to said bonds. Bonds are exempt from municipal and county taxation in Allegany County.

FINANCIAL STATEMENT OF ALLEGANY COUNTY.

Assessable Basis $52,163,212.39
Bonded Indebtedness (not including this issue) 710,000.00
No Floating Debt.

Address all bids to the County Commissioners of Allegany County, Cumberland, Maryland, care of Thomas P. Richards, Clerk, marked "BIDS FOR BONDS". Further information can be obtained from the clerk.

By order of the County Commissioners of Allegany County, Maryland.

THOMAS P. RICHARDS,
Clerk.

Bids close January 31, 1922.

Street Paving

Lake Wales, Fla.

Will let about 175,000 square yards street paving on January 31st, at 2 o'clock P. M. Plans and specifications on file on and after January 10th, at office of Town Clerk, M. M. Ebert, also office of J. W. Turner, Engineer, Lakeland, Florida.

Bids close December 30, 1921.

Street Improvements

Athens, Ala.

The City of Athens, Alabama, will receive sealed bids until seven thirty o'clock, P. M., Friday, December 30, 1921 at the office of the City Clerk, for curbing and guttering, paving, constructing catch basins, culverts, etc., and for spreading a seal coat on certain waterbound macadam streets within the districts described in Ordinances No. 33 and 34.

The proposed work includes the following approximate quantities:

Concrete Curb and Gutter 15,835 Lin. Ft.
Bituminous Seal Coat 50,700 Sq. Yds.
Waterbound Macadam with Seal Coat 2,900 Sq. Yds.
Cast Iron Inlets 6.
Concrete Valley Gutters 57.5 Sq. Yds.
Reinforced concrete Culvert 14 Cu. Yds.

Each bid must be accompanied by a certified check in the sum of Seven Hundred Fifty ($750.00) Dollars.

The City reserves the right to reject any and all bids. Bids must be made upon blank forms to be furnished by the City. Specifications and bidding blanks may be obtained at the office of the City Engineer, Athens, Alabama.

S. A. DAVIS, City Clerk.

Oil Engines, Electrical Apparatus, Water Meters, Etc.

The City of Southport, N. C., contemplates making some Municipal improvements in the near future, and will entertain correspondence from Municipal Engineers and Manufacturers of oil engines, electrical apparatus, water meters, etc.

S. L. DOSHER, Mayor,
Southport, North Carolina.

Bids close January 4, 1922.

Dredging

Belzoni, Miss.

Sealed bids will be received until one o'clock P. M., Wednesday January 4th, 1922, by the Commissioners of the Belzoni Drainage District at their offices in Belzoni, Mississippi, for the redredging and cleaning out of about 100 miles of dredged ditches.

The right is reserved to reject any and all bids.

Further information upon request

C. E. MILLER, Engineer.
S. CASTLEMAN, President.

Bids close January 10, 1922.

Paving

Sealed bids will be received and opened by the City Council of Palatka, Fla., at their regular meeting on January 10th, 1922, at 8 P. M., for constructing and setting approximately 20,000 lineal feet of concrete curb, and laying approximately 13,000 square yards of brick paving.

Plans and specifications can be seen at the office of the City Clerk after December 18th.

All bids must be accompanied by a certified check for $1,000.00, payable to the Treasurer of the City of Palatka, the same to be forfeited to the City of Palatka in the event that the contractor, to whom the contract is awarded, fails to qualify within the stipulated time.

The contractor, to whom contract is awarded will be required to give a surety bond in an amount equal to one-third of the contract price.

The right is reserved to reject any, or all, bids.

JNO. H. RANDOLPH,
City Engineer.

CHAS. BURT,
City Clerk, Palatka, Fla.

Bids close January 10, 1922.

Steel or Concrete Bridge Construction.

Lake Charles, La.

Sealed proposals for constructing the Moss Bluff Highway Bridge across the Calcasieu River, near Lake Charles, Louisiana, and addressed to the Hon. W. J. Prater, President of Police Jury, Calcasieu Parish, Louisiana, will be received at the office of the Parish Clerk, Lake Charles, Louisiana, until 12 o'clock M. January 10th, 1922.

THE WORK COMPRISES:

The construction of a steel highway bridge across the Calsasieu River and a reinforced concrete or creosoted timber approach trestle across the adjacent marsh, together with a steel lift span with 94 ft. clear opening. The bridge will be built on either of two alternates for various combinations of the different types of construction and for each alternate the construction of the substructure, a steel superstructure may be bid on separately, as distinct contracts. Contractors may bid on any or all alternate types of design or upon any combination of contracts. Both furnishing and erection of structural steel trusses and lift span are in all cases included in the same contract. Some of the river piers will be carried over sixty feet below ordinary river level. The entire structure will be about One Thousand Four Hundred Fifty (1450) feet in length and either 18 or 20 ft. in clear width. Instructions and proposal blanks may be obtained from and detailed plans and specifications are on file with the Parish Clerk at Lake Charles, Louisiana, and at the office of The Terrell Bartlett Engineers, Calcasieu Building, San Antonio, Texas. Each proposal must be accompanied by a certified or cashiers check in the sum of not less than 5% of the amount bid.

Bidders must fulfill conditions provided in the "Instructions to Bidders."

The Parish reserves the right to reject any or all bids.

W. J. PRATER,
President Calcasieu Police Jury,
Lake Charles, Louisiana.

Bids close January 2, 1921.

$35,000 5½% Street Improvement Bonds

$20,000 5½% Sewerage Extension Bonds

Laurens, S. C.

Notice is hereby given that sealed bids will be received by the Mayor and Board of Aldermen of the City of Laurens, S. C., until twelve o'clock noon on January 2nd, 1922, for the sale of $35,000.00 Street Improvement Bonds to be dated January 1st, 1922, and to mature twenty years after date, and to bear interest at the rate of 5½% per annum, payable semi-annually on the first days of January and July and to be issued in the denomination of $1,000. And the said Mayor and Aldermen will also receive at the same time sealed bids for the sale of $20,000 Sewerage Extension Bonds to be dated January 1st, 1922, and to mature thirty years after date, and to bear interest at the rate of 5½% per annum, payable semi-annually on the first days of January and July, and to be issued in the denomination of $1000.

All bids must be sealed bids, and must be accompanied by a certified check of a sound and reputable bank in the sum of one thousand dollars, payable to the order of John A. Franks, Mayor of the City of Laurens, S. C., to be forfeited to the use of said City in case the bid is accepted and the purchaser fails to comply with his bid. The Mayor and Aldermen of the City of Laurens reserves the right to reject any and all bids. Further information furnished on application to Stanley W. Crews, Clerk of the City of Laurens, S. C.

By order of the City Council of Laurens, S. C. This December 12th, 1921.

JOHN A. FRANKS, Mayor.

Bids close December 22, 1921.

Automatic Power Shovels.

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office, suite 200 New Orleans Court Building, 7:30 P. M. December 22nd, 1921, and then publicly opened for the furnishing of Automatic Power Shovels and other equipment as shown and specified, for use at the Coal Handling Plant.

A deposit of $300.00 (Three Hundred Dollars) in cash or certified check is required with proposal.

Bond of 50% of bid is required with Notarial Contract.

Payment—90% of the bid for material will be paid upon delivery and acceptance of same on the site. The balance will be paid 20 days after the shovels and other equipment have been placed in operation and has been satisfactory to the Chief Engineer of the Board.

Proposals must be submitted on a special proposal form prepared by the Board.

Plans and specifications and proposal forms are on file in the office of Mr. H. M. Gallagher, Chief Engineer, No. 1 Canal Street, by whom full sets will be furnished to prospective bidders.

The right is reserved to reject any or all bids and to waive informalities.

R. S. HECHT, President.
J. F. FINKE, JR., Secretary.

REQ. ED. 10533

Bids close January 3, 1922.

Street Paving

Anniston, Ala.

Sealed proposals will be received at the office of the City Clerk of Anniston, Alabama, until 7:30 P. M. on 3rd day of January, 1922, and then opened for approximately 25,000 sq. yds. street paving (Asphaltic Concrete, bitulithic, brick or Tarvia Penetration on a reconstructed slag base or Portland Cement Concrete) and 26,000 lin. feet combined curb and gutter together with all necessary inlets, manholes, drains, etc., on Quintard Avenue and 5th Street. Certified check or bidders bond for $1,000.00. Estimated cost $100,000.00. Specification will be furnished on receipt of certified check for $5.00 which will be refunded on return of the papers. The right is reserved to reject any or all bids.

ROBERT L. TOTTEN, Consulting Engineer.
Birmingham, Ala.

H. B. RUDISILL,
Mayor.

Bids close January 2, 1922.

$20,000 6% Paving Bonds

The council of the city of Plant City, Florida will at its regular meeting to be held at the council chamber in said city on Monday January 2, 1922, at 8 P. M., receive sealed bids for the purchase of $20,000 street paving bonds of said city, dated July 1, 1921, interest 6 per cent payable semi-annually, principal and interest payable at the National City Bank, New York, in gold coin. Copy of record furnished successful bidder, and a reasonable time allowed for examination, bids received on the hypothesis that purchaser's attorney approve legality of issue. A certified check for $100.00 must accompany all bids as a guarantee that the successful bidder will comply with the terms of the sale in a reasonable time. Address bids and request for further information to the undersigned. No bid considered for less than 95 cents on the dollar, no commissions allowed. Accrued interest to be refunded.

W. H. DURRANCE,
City Clerk, City of Plant City, Fla.

Bids close January 5, 1922.

Water Works And Electric Lighting System Improvements

Abbeville, Louisiana.

Sealed proposals will be received by the Mayor and Board of Aldermen of the Town of Abbeville, Louisiana, on or before Thursday, January the 5th, 1922, at the hour of 10.30 A. M., and then publicly opened, for furnishing materials, equipment and supplies, and constructing certain Water Works and Electric Lighting System Improvements for the said Town, in accordance with plans and specifications on file in the office of the Mayor of the Town of Abbeville, Louisiana.

The proposed work consists of the furnishing of Oil Engines, Generators, Exciters, Switch-Boards, Pumps, Water Line Materials, Well Working Equipment, Building, Reservoir, Street Lighting and Pole Line Equipment, Oil Storage Tanks, and the Construction of same into the complete improvement, as detailed in the specifications and shown on plans.

Each proposal must be accompanied by a certified check for Five (5%) Percent of the amount of the bids, made payable to Hon. J. Camile Broussard, Secretary, Abbeville, Louisiana, as an evidence of good faith.

Specifications, Form of Proposal, Contract and Plans may be seen at the office of the Mayor in Abbeville, Louisiana or specifications will be mailed upon application to Henry A. Mentz, Consulting Engineer.

The right is reserved to reject any or all bids.

ROM P. LeBLANC, Mayor,
J. CAMILE BROUSSARD, Sec'y.
Town of Abbeville, Louisiana.
HENRY A. MENTZ,
Consulting Engineer,
Magnolia, Mississippi.

Bids close Jan. 4, 1922.

Y. M. C. A. Building

Fayetteville, N. C.

Sealed proposals will be received until 3 P. M. January 4th, 1922, by J. W. Gainfort, General Secretary of the Y. M. C. A., at Fayetteville, N. C. for the erection and completion of a Y. M. C. A. Building in the City of Fayetteville, North Carolina.

Drawings and specifications may be seen at the offices of Chas. C. Wilson, Architect.
No. 105 Davis Building, Wilson, N. C.
No. 208 First National Bank Building, Gastonia, N. C.
No. 804 Palmetto Building, Columbia, S. C.
Chamber of Commerce, Fayetteville, N. C., Y. M. C. A. Office, Fayetteville, N. C., also in the offices of the Builders Exchange in the following Cities: Atlanta, Ga., Richmond, Va., Columbia, S. C., also in the Chamber of Commerce of Charlotte, N. C., and may be obtained upon application to the architect 804-7 Palmetto Building, Columbia, S. C., upon the deposit of $25.00 as a guarantee that they will be returned in good condition and without expense not later than the date set for the opening of the bids, and that a bonafide bid is filed. Deposit will be returned when above conditions have been complied with, otherwise it will be retained by the architect. Additional sets will be furnished upon request at the charge of $15.00.

Sub-contractors or material men who desire to submit bids to the General Contractor may secure such portions of plans and specifications as they may desire from the Columbia Office at current prices for blue prints.

The Owners reserve the right to let independently any or all of the following portions of the building:

Plumbing, Heating and Electric Wiring.

The right is also reserved by the Owners to reject any or all bids submitted.

Bids close January 4, 1922.

Garbage Incinerator

Department of Public Finances,
City of New Orleans, La., December 15, 1921.

Sealed proposals will be received at this office until the hour of 11 o'clock A. M., Wednesday, January 4th, 1922, for furnishing labor, materials and equipment, and constructing in accordance with the plans and specifications on file in the office of the City Engineer, any or all of the following pieces of work:

(1) Foundations and building complete including piling;

(2) Radial brick chimney 150 feet by 6 feet complete on foundation furnished;

(3) Furnishing and installing of Incinerator equipment of the Decarie type, including electric travelling crane and electric generating equipment complete.

A certified check for an amount equal to 10% of the total amount bid in the proposal, payable to the undersigned Commissioner of Public Finances, or a bidder's bond for the same amount, must accompany each proposal.

Bond required: Equal to the total amount of contract.

The City Engineer will furnish bidders with a blank form of proposal. No proposal will be considered unless submitted on such form, and the bid price shall be expressed in both writing and figures, and enclosed in a sealed envelope marked "Proposal for Incinerator" addressed to the Commissioner of Public Finances of the City of New Orleans.

Bidders must have paid their City License in order that their bids may be accepted.

The successful bidder must enter into contract at his expense before the City Notary.

Copies of the plans and specifications now on file, as well as proposal blank forms, may be had at the office of the City Engineer upon the deposit of $50.00, which amount will be refunded if the plans and specifications are returned in good condition within ten (10) days after the opening of bids.

The City reserves the right to reject any and all bids.

R. M. MURPHY,
Commissioner of Public Finances,
City Hall, New Orleans, La.

CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS WATER POWERS MISCELLANEOUS PROPERTIES

FOR SALE—100 acres of rich mineral and oil land in Southern, Ill.; near the best Spar mines in the world. Will sell for $200 an acre. Address Jessie Rossiger, 2633 Marcus Ave., St. Louis, Mo.

FOR SALE—239 acres proven gold and platinum dirt, five to fifty dollars per ton, placer and quartz mining. Price $30,000. O. M. Alexander, Anniston, Alabama.

COAL

AVOID COAL shortage and high prices later. Buy coal from us now and save money. Can furnish smokeless, splint, gas, by-product for your plant, home or retail yard. Write or wire for prices. MOORE & HETZEL, Charleston, W. Va.

COAL AND TIMBER LAND

FOR SALE—3100 acres timber and bituminous coal lands, four-to five-foot seam. Clearfield County, Pennsylvania. An electrified operating bituminous coal mine, Miller seam and good acreage. Clearfield County, Penna. Full information on request. R. W. Bruce, Lebanon, Penna.

RATES AND CONDITIONS

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. **When the advertisement contains a number of long words, proper allowance should be made.** Terms: invarably cash with order; check, post-office or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c. per line; 300 lines, 26c. per line; 500 lines or more 25c. per line.

COAL LANDS AND MINES

Strip Coal for sale 900 acres Best strip coal proposition in West Ky., 4 foot vein, clean, high class steam and domestic purposes. Average overburden 25 feet shale and dirt. One and half mile from I. C. R. R. M. M. Gilmour, Dawson Springs, Ky.

FOR SALE—2500 acres unimproved coal land in tracts, $35 per acre; has several seams; top drift; adjacent railroad, mines, gas and oil. Write Cavanagh, McAlester, Okla.

SUBURBAN PROPERTY

FOR SALE

97 acres adjoining the City of Roanoke. Best lot sub-division; big money-maker; good terms act quick. Address No. 5876 care Manufacturers Record.

TIMBER OPERATIONS

FOR SALE—Lumber milling proposition, complete equipment, now in operation, Eastern Carolina; 25,000,000 feet timber; plenty more available; big bargain; $175,000. half cash, balance terms. Address No. 5700 care Manufacturers Record, Balto., Md.

TIMBER LAND

FINEST TRACT hardwood in South Ark., 24,000 acres. Cut more than 11,000 feet per acre, white and red oak, gum, ash, cypress. $50. per acre in fee,. W. T. Kime, Grandview, Missouri.

TIMBER FOR SALE.

Twenty million feet—on ACL and SAL Railways. One tract 2000 acres original growth. Old plantation never been on market. Terms can be made. R. H. Norfleet, 4914 Killam Ave., Norfolk, Va.

TIMBER LANDS.—21,000 acres virgin timber known as best tract in Florida, will cut one hundred million feet. About one fifth cypress. S. M. Wilson, Bartow, Fla.

MINERAL AND TIMBER LANDS WATER POWERS, MISCELLANEOUS PROPERTIES,

TIMBER

YELLOW PINE FACTS.

150 million feet pine stumpage, no better logging ground, easy reach Trunk line R. R. 50 million feet @ $3.00 per M, balance can be bought for less than $1.00 per M. There is more timber in the territory than we can handle, would sell ¾ interest, to reliable party. This is a right now, working proposition, also for investment. No pikers or agents entertained. Must act quick. Address, DIAMOND LBR. CO., Meridian, Miss.

SPECIAL INDUCEMENTS TO ACTUAL BUYERS.

We offer for a short time only, 24-million to 26-million ft., saw timber in one body, for $67,500. Third cash, balance to suit buyers. Original growth, thrifty, large, long, high class timber. Short leaf pine largely predominating. Remainder cypress, poplar, oak, gum, ash, &c. We offer nearby same, about 60-million ft. where the same hardwoods predominate, about 30% pine. Extra attractive timber from every lumber standpoint. Good logging ground. Water and R. R. transportation. Last boundary $2.50 per M-ft. Address P. O. Box 1128, Wilmington, N. C.

TIMBER FOR SALE

From twenty to one hundred and fifty million feet, in separate tracts, of pine and of hardwood. Deal direct with owner.
J. W. Barnes,
Savannah, Ga.

GEORGIA SHORT LEAF ROOFER TIMBER

About thirty five million feet-average haul about two and one half miles to Railroad. If you need a first class location, address P. O. Box 37, Valdosta, Ga.

TIMBER FOR SALE

200,000,000 feet virgin yellow pine.
Mauer & Company,
Orlando, Florida.

FARM FRUIT, AND TRUCK LANDS

ARKANSAS

River Bottom farm of 1240 acres. Located 12 miles from Texarkana, Arkansas 800 acres in cultivation, 10 houses. A money maker for some good farmer. Price $50. per acre; or will exchange for hotel or merchandise. John Zahnd, P. O. Box 28, New Albany, Ind.

A BIG LAND BARGAIN!

50,000 acres cut-over land near Little Rock and Hot Springs, Arkansas, at surprising offer. Good for truck and fruit raising; also some grain and cotton land. Accessible to Missouri Pacific and Rock Island Railroads, Fort Smith and Hot Springs Highways, and other good roads. Mineral rights accompanying purchase make this an excellent stock proposition. $3.50 per acre; terms one half cash, balance one and two years. Write for plat and information. This is a big opportunity for a big man!
A. C. Read Real Estate Co.,
117 West 2nd Street, Little Rock, Ark.

FLORIDA

FOR SALE—By owner 160 acres good Citrus land near Indian River and Dixie highway. Convenient to transportation. Price $40.00 per acre. Terms part cash. Balance three years 7% annually.—S. Hendry, City Point, Brevard Co., Fla.

FOR SALE—160 acres, 4-room house, on concrete road near Arcadia; 160 acres near and lots in Tampa. E. Yager, DeSoto Hotel, Tampa, Fla.

FOR SALE—Any one interested in a 50 acre Orange Grove in full bearing, situated on one of the largest and most beautiful Lakes in Florida—2½ miles from a progressive town, please communicate with the owners for terms. Must be seen to be appreciated. Lock Box 71 Leesburg, Fla.

FARM FRUIT, AND TRUCK LANDS

FLORIDA

COME TO FLORIDA—Where "it's summertime in the wintertime and pleasant all the year 'round." We have a home, grove or truck farm for you; send for new booklet with general information about Tampa and Florida, and list of properties we have for sale. Tampa-West Coast Realty Co., (Inc.) Opp. Post Office "Since before the War", Tampa, Florida.

FOR SALE—A Section of land (640 Acres) Platted to 20 acre farms, six miles of ditches installed and other improvements costing several thousand dollars. Located eight miles from the Bay front at Miami, Fla., in the direct path of Miami's growth-Miami is the fastest growing city in the U. S. I am not able financially to market this property properly and the man or men able will make a fortune. Price $44,800. $30,000 will handle. W. C. Nowlin, P. O. Box 1102, Miami, Fla.

FLORIDA LANDS

FOR SALE—5000 acres high class grove and trucking land, $10. acre. Artesian well. All kinds lands, timber tracts, groves, etc. Mauer & Company, Orlando, Florida.

20,000 ACRES SOUTH FLORIDA CITRUS FRUIT LAND.

A Colonization proposition, highest class Citrus fruit and farming land, well located $6.00 an acre. Jno. W. Pelot, Arcadia, Florida.

45 Acre Orange Grove, producing 12,000 boxes yearly. $50,000.00 with terms. Jno. W. Pelot, Arcadia, Fla.

TREASURE ISLAND FOR SALE.

The most unique place in Florida. Practically frost proof. Over six thousand citrus trees in grove form, some bearing. Ideal place for growing winter vegetables. Best bass fishing, boating, swimming and hunting. One bungalow, three cottages, two deep flowing four inch wells. An exceptional spot for private home, colony or hotel. There are ten thousand people who want this property. It is just a question of finding one out of the ten thousand. The other nine thousand, nine hundred and ninety nine will be sorry that they were not found. Send for Circular. E. H. Mote, Owner, Leesburg, Fla.

FOR SALE—I can sell you sugar lands, orange and grape-fruit groves, truck and farm lands improved and unimproved, city-resort lots, winter homes up to $100,000; thousands of acres of cut-over lands. Write Sadler, Nurseryman, Box 866, West Palm Beach, Fla.

MARYLAND

300 acre water front farm on South River, 1½ miles over improved roads from Annapolis, Maryland. This farm has two miles or more of water front, within easy reach of Baltimore, Washington, Philadelphia and New York, makes this an ideal place for any one desiring a combination city and country home; price Fifty-five thousand dollars. Chas. H. Heintzeman, Specializing in water front and inland farms in every section of Maryland. 922 South Charles St., Baltimore, Md.

OKLAHOMA

FOR SALE
Land in Eastern Oklahoma $3.00 per acre.
Jasper N. Butler,
Poteau, Okla.

TENNESSEE

FARM of 121 acres in Franklin county with 30 acres splendid Elk river bottom land, four-room house in good condition and other necessary farm buildings, including stock and farm implements. $7,000. McBryde & Annis, Chattanooga, Tenn.

BUSINESS OPPORTUNITIES

FOR SALE—An unusual chance to buy real estate in the Nation's Capitol. No mistake in such a purchase. The remaining 500,000 square feet of a splendidly located subdivision in the fashionable northwest section of Washington, D. C. Will sell to clean up at only 15 cents per square foot. There are a number of new houses, all occupied by the owners, and sold to them for from $7500.00 to $11,000.00 each in this subdivision. Streets are graded and every lot has a fifteen or twenty foot alley. Splendid chance for speculative building or retail of lots. Terms can be arranged. Wm. S. Minnix, owner, Kellogg Building, Washington, D. C

MONEY NEEDED FOR EXPANSION.

Well established Southern concern, manufacturers of Galvanized Roofing, also have exclusive sale of other good lines in Southern territory, wants additional capital for expansion. If interested write fully in first letter. Address No. 5941 care Manufacturers Record, Balto., Md.

REAL ESTATE investment, Pecan and farming proposition 240 acres. Improved-going business, better every year. ½ interest only $10,000 cash or terms. Pay 7% dividend now. Should return original investment few years. Will manage same for investor. H. H. HANSEN, Macon, Miss.

WILL INVEST

Capital, services and experience in a legitimate manufacturing business capable of expansion located Southern city of 20,000 or over. Capable accountant and executive. No. 5940, care Manufacturers Record.

FOR SALE—$25,000 first Mtg. bonds, funds to be used in the development of 300 H. P. In addition to our now 300 in operation. Wofford Shoals Lt. & Power Co., Cornelia, Ga.

Would like to dispose of a meritorious manufacturing proposition by states or territory. Would like to get in communication with a broker or sales organization. John E. Robbins, Greensburg, Ind.

Want to get in communication with party having several hundred thousand or preferably a few million dollars who would like to defer big profits for a few years until income tax situation has reached normal basis. P. O. Box 258, Atlanta, Ga.

FOR SALE—Lumber Milling Proposition, 5,000 acres in fee, complete equipment, now in operation. West Virginia. 15,000,000 feet of timber, 500,000 feet now on stick. This property will be sold at a bargain. Address Jno. C. Chidester, Weston, West Virginia.

BANK & LANDS—Controlling interest in going Natl bank, minor interest in 6 nearby banks, owners beautiful residence. Will include several fine farms. Address J. L. McKamey, Imboden, Lawrence Co., Ark.

I SPECIALIZE in industrial, warehouse and business sites at and adjacent to Washington, D. C.

M. B. HARLOW,
Harlow Building, Alexandria, Va. **Colorado Building, Washington, D. C.**

WANTED—A good-sized block of high-grade stock of exceptional earning possibilities to market among our large clientele. Money must be for expansion. Wiers & Co., 115 Broadway,, New York Established 1894.

Own ten million feet cypress and twenty five to thirty million feet fine quality hardwoods, largely gum, with quite an amount of hickory ash, oak etc., on navigable water and R. R. in Florida; also logging equipment.
Want $150,000.00 to purchase some adjoining timber and erect plant to cut it.
Party furnishing money either to take interest in business or if furnished as a loan would pay bonus on output until paid. No. 5938 care Manufacturers Record.

BUSINESS OPPORTUNITIES

WANTED—One who thoroughly understands the brick business wants location and local capital for plant. A. G. Wagner, Route D, Box 50—I., San Antonio, Tex.

FOR SALE—Complete laundry in growing Florida city; Stone Crusher business in Virginia which is showing a splendid income, Department Store in live East Tennessee city of 6000 population. Businesses sold in all parts of the South.
CHAS. L. HENCK COMPANY
COMMERCIAL BUSINESS BROKERS
KNOXVILLE, TENNESSEE.

IF YOU NEED CASH in your Business—Get connected with a high powered, first class organization of 80 men, capable of selling your securities in a few weeks time. We handle any kind of business, anywhere. Address, C. W. Morton, 829 Equitable Bldg., Baltimore, Md.

WANTED—Capitalists to develop the rich Sea Islands, where the choicest vegetables grow in winter. Semi-tropical on account of the warn Gulf Stream. Plenty of labor. Excellent climate and health. Expert investigation solicited. Lake Realty Company, Beaufort, S. C.

SUBMERGED PIPE LINES

SUBMERGED PIPE LINES—Absolutely tight submerged pipe line installations at materially reduced cost. B. F. Round, Box 679 Portsmouth, Va.

LUMBER AND BUILDING MATERIAL

FOR SALE—200 m. ft. 13/16x2¼" face factory maple flooring; 150 m. ft. 13/16x 1½" face factory maple flooring; 14 m. ft. Fas brown ash; 35 m. ft. 7/4 No. 2 & Btr. maple; 50 m. ft. ¾" No. 2 Com & Btr. Birch; 50 m. ft. 5/4 Basswood key stock. J. W. Wells Lumber Co., Menominee, Mich.

YELLOW PINE LUMBER
From smallest mouldings to heaviest structural timbers: framing, flooring, ceiling, siding, finish, roofers, lath. In straight or mixed carload shipments. Let us quote you on your next bill.
C. G. HULL LUMBER COMPANY,
Laurel, Mississippi

WHEN IN NEED of flooring, ceiling, siding, finish, roofers, lath, shingles and dimension; write Stephens Lumber Co., Jacksonville, Fla.; 50 E. 42d St., New York city or Hibernia Bank Bldg., New Orleans, La.

PATENTS FOR SALE

Perfect pipe wrench, two parts, automatic, instant adjustment, broad in scope, can't slip or lock, strong, simple, cheap. Approved by skilled mechanics. R. D. Box 884 Seattle, Wash.

Window screen frame patent
For sale or Royalty
Address No. 5930 care Manufacturers Record, Baltimore, Md.

PATENT ATTORNEYS

INVENTORS—Send sketch or model of your invention, for opinion concerning patentable nature, and exact cost of applying for patent. Book, "How to Obtain a Patent," sent free. Gives information on patent procedure and tells what every inventor should know. Established 25 years. Chandlee & Chandlee, 412 7th St. N. W., Washington, D. C.

PATENTS, TRADE-MARKS AND COPYRIGHTS.—Write for our Free Illustrated Guide Book and EVIDENCE OF CONCEPTION BLANK. Send model or sketch and description of your invention for our opinion of its patentable nature free. Highest references. Prompt service, Reasonable terms. Victor J. Evans & Co., 712 9th St., Washington, D. C.

PATENT ATTORNEYS

PATENTS.—Booklet free. Highest references. Best results. Promptness assured. Watson E. Coleman, Patent Lawyer, 624 F St., Washington, D. C.

JACK A. SCHLEY,
Patent and Trade-Mark Attorney,
306 Interurban Building, Dallas, Tex.
319 McGill Building, Washington, D. C.

PATENT-SENSE.
"The Book for Inventors and Manufacturers."
FREE. WRITE
LACEY & LACEY,
Dept. 15, Washington, D. C. Established 1869.

INDUSTRIES WANTED

MISCELLANEOUS

You will have the finest kind of cooperation from the citizens, city and county officials if you should determine to locate your branch factory at Hattiesburg, the HUB of South Mississippi.
Get in touch with the Chamber of Commerce immediately.

WANTED—Liberal Inducements are offered manufacturing enterprises to locate in Lincolnton, N. C., where labor troubles are unknown and cheap electric power in unlimited quantity may be secured. Address Chamber of Commerce, Lincolnton, N. C.

FACTORY SITES

Free Factory Sites at Nansemond, the Industrial City of Tidewater, Virginia, located on four trunk line railroads with high tension power lines, water mains, etc. Splendid concrete road, only fifteen miles from the famous Hampton Roads seaport. We offer wonderful inducements to manufacturers. For particulars write Nansemond Industrial Corporation, Arcade Building, Norfolk, Virginia, P. O. Box 438.

FACTORY OR WAREHOUSE SITE.
Fronting 600 ft. on N&WRR, depth 200 ft., city improvements, paved street, $160.00 per foot. Option to lease on 6% value and apply first years rent on purchase. G. S. Briggs and Co., Norfolk, Va.

BALTIMORE

FACTORY

SITES

William Martien & Company.

1413 Lexington Bldg.,

Baltimore, Md.

INDUSTRIAL PLANTS

FOR SALE—One 10,000 capacity mill; complete and plenty timber at $2 for stumpage. Write J. W. Meldrim, Acline, Fla.

Retail Lumber Yard and Planing Mill doing large business—best location in city. Owner will sell so as to give his entire time to other business. For particulars address Box 113, Norfolk, Va.

FOR SALE—Planing and re-milling plant. In yellow pine district on Atlantic seaboard. Capacity 80,000 feet per day. Enjoying annual retail business of $400,000 in one of South's largest cities. An old established enterprise which owner desires to sell and retire. Address No. 5913 care Manufacturers Record, Balto., Md.

SOUTHERN COTTON MILLS.
We have for sale two cotton mills.
One of 40,000 spindles.
One of 4200 spindles.
Write or wire for particulars.
F. C. ABBOTT & CO.,
Trust Building, Charlotte.

INDUSTRIAL PLANTS

FOR SALE OR LEASE—Practially new modern daylight factory, fireproof. Forty thousand square feet. Central Illinois. Fine opportunity for high class plant. Small capital will handle this. Address Owner No. 5928 care Manufacturers Record.

MERCHANDISE WANTED

SPOT CASH for surplus merchandise job lots, close-outs, discontinued lines, goods-ordered-and-left-on-hand,' etc. (no machinery). No quantity too large. Quick cash for real bargains. Fantus Bros., 529 S. Dearborn, Chicago, Ill.

PRINTING AND EMBOSSING

BETTER PRINTING for less money. Printing users send for free samples and standardized prices of a thousand items. E. Fantus Co., Printers 523 S. Dearborn St., Chicago, Ill.

TARIFF

PROTECTION
OUR PROPER PERMANENT POLICY
by James T. McCleary
Formerly Congressman from Minnesota, Assistant Postmaster General in the Roosevelt Administration and ex-Secretary of the American Iron & Steel Institute.
One of the most informative and interesting books on one of our most important national questions
THE TARIFF
"Unquestionably the best and most elucidating treatment of the subject ever put in book form."—Leslie M. Shaw, Former Secretary of the Treasury.
Price $3.50 in U. S. $4.00 Elsewhere
Postage Prepaid
Address Manufacturers Record, Balto., Md.

INFORMATION WANTED.

What is the latest available authentic information worth to you? General information bureau; congressional and legislative information; general research work; briefs; digests; codifications and abstracts. Interviews. Investigations. General business representative. Materials for essays, debates, theses, sermons, speeches, lectures, arguments, addresses, editorials, and special articles on any subject and for any occasion. Card, analytical, intensive and general index work. Concordances. If you want thorough, conscientious, individual, expert work procure the services of Wm. McAfee Goodwin, District National Bank Bldg., 1406 G St., N. W., Washington, D. C.

FINANCIAL

"The Betrayal of the People in the Federal Reserve Act" T. Cushing Daniel, author. Popular edition 25¢—write your Representative in Congress for Senate Bill 2342, the only remedy, and urge its enactment into law, to protect your business, your family and your country. The Monetary Educational Bureau, 1416 F. St., Washington, D. C.

BONDS—I have buyers for large or small issues of Mercantile, Manufacturing, Industrial and Mining bonds. Correspondence solicited. A. W. JOHNSON, 212 Mass. Bldg., Kansas City, Mo.

SITUATIONS WANTED

Salesman, 35 years, business ability, secretary, manager, open for 1922. Address W. L. Reynolds, Box 215, Asheville, N. C.

EXPERIMENTAL WORK (Mechanical) Inventive and practical ability. Connection desired where ideas can be developed for employer's benefit. Opportunity my aim. For particulars address P. O. Box 914—Columbus, Ohio.

AGENCIES WANTED

AGENCIES WANTED—Wanted to represent manufacturers in Southeast. Automotive products and textile mill lines. Sales organization and distributing branch in Atlanta, Ga. Address No. 5924 care Manufacturers Record, Balto., Md.

AGENCIES WANTED.
Contractors, railroad and warehouse equipment and supplies. Cars, trucks, shovels, cranes, track accessories, etc. St. Louis and South. Twenty years experience. Well appointed office maintained in St. Louis. Address No. 5942 care Manufacturers Record, Balto., Md.

SALES ENGINEER—Manufacturers representative will take line of meritorious products for reputable manufacturer, on sales agency basis in territory of Virginia, West Virginia and Maryland for power plants industrial, utilities and municipal engineering. Government business expediently conducted. W. J. SPENCER 52 Century Building, Washington, D. C.

ATTENTION MANUFACTURERS.
WANTED—Exclusive representation in the state of Oklahoma for practically every kind of Building Specialties, also staple lines of Building Material. We have offices and warehouses in two Cities, and cover the entire state with traveling representatives. Address, Monarch Material Co., Muskogee, Okla.

MEN WANTED

SITUATIONS OPEN—If you are seeking a managerial, professional, technical or semi-executive connection and your ability warrants your commanding annual remuneration in the amount of $2500 to $25,000, we invite your correspondence. Inquiry considered confidential. Address:
INDUSTRIAL SURVEY COMPANY,
Box 200, Niagara Falls, N. Y.

SALES ENGINEER OR REPRENTATIVE—One who is calling on power plants in Boston, Mass., and vicinity, Buffalo, N. Y. and vicinity, to sell on commission as side line high grade article that is needed and wanted by every power plant. Address No. 5935, care Manufacturers Record, Balto., Md.

SALESMAN—One who is calling on power plants in any part of Pennsylvania, New Jersey, Delaware, Maryland to sell on commission as side line high grade article that is needed and wanted by every power plant. Address No. 5880 care Manufacturers Record, Baltimore, Md.

IF ACTUALLY QUALIFIED for salary between $2500 and $25,000, communicate with undersigned, who will negotiate strictly confidential preliminaries for such position; executive, administrative, technical, professional; all lines. Not an employment agency. Undersigned acts in direct confidential capacity, not jeopardizing present connections. Established in 1910. Send name and address only for explanatory details. R. W. Bixby, Inc., 303 Lockwood Bldg., Buffalo, New York.

MACHINERY AND SUPPLIES

Toilets $17. Government used. Perfect working order. Vitreous china or cast-iron enamel tanks. Washdown bowl. Discount large quantities. Govt.-Used Lumber Yard, Atlanta, Ga.

HIGH COLLAR NATIONAL LOCK WASHERS.
40 kegs 1" ¼x⅜
30 kegs ¾" 3/16x½
at half of the present market.
KEITH, SIMMONS & CO., Nashville, Tenn.

1,000,000 BAGS 3 CENTS. Best NEW bags made from heavy burlap, size 14x33 inches; will sacrifice at 3 cents apiece, delivered anywhere. Sample orders; will ship not less than 1,000 bags for $30.00. Jos. Werner, 70 Pliny St., Hartford, Conn.

1000 Contractor's, and ship tackle blocks, wood and steel—Brand new. Will sacrifice. Pratt Thompson, 220 E. Lexington St., Baltimore, Md.

MACHINERY AND SUPPLIES WANTED

WANTED 14" to 20" lever leather belting presses, feed roll splitting machine—either new or used for cash. Jerry Bros. Belting Co., Richmond, Va.

SPECIAL ADVERTISEMENTS OF GENERAL INTEREST

"MANUFACTURE WITHOUT PLANT INVESTMENT."

Operating Machine, Boiler, Blacksmith, Pattern Shops and Foundry, principally on marine work and desiring to obtain the manufacture of some tool, machine or equipment, we will devote our plant part or in whole to such manufacture and will cooperate in selling of same. This is an opportunity to connect up with a going concern fully equipped as to tools, mechanics and management.

Address P. O. Box 632 JACKSONVILLE, FLA.

FURNITURE AND CHAIR FACTORY
For Sale at Public Auction

The Troutdale Furniture Factory and Troutdale Chair Factory will be sold at public auction on January 6, 1922, at Troutdale, Va. The stock of manufactured goods consisting of 3500 dining chairs and 800 pieces of furniture will also be sold on the above date.

P. L. HARRINGTON, Trustee.



Plant Sites For Sale in the Birmingham District

HYDRO-ELECTRIC POWER
EQUABLE CLIMATE

Sizes to suit all needs on all railroads. Supplies of coal, coke, iron and steel within trucking distance.

Labor situation better than in other industrial centers. Hydro-electric power available. Equable climate. Address

BIRMINGHAM REALTY CO.
Owners
BIRMINGHAM, ALA.

To the MANUFACTURER and DISTRIBUTOR

Abundant supplies of coal, coke, iron, timber and other raw materials lie in the regions of Georgia and Alabama, which are traversed by the

Central of Georgia Railway

Cheap electric power, numerous undeveloped water-powers, good home markets and excellent shipping facilities. Therefore, manufacturing conditions are ideal.

Many of the cities on the Central of Georgia Railway occupy advantageous positions for distributing warehouses, and a number of the larger northern and eastern manufacturers supply their southeastern trade from branchhouses in these cities.

Full and detailed information upon application.

J. M. MALLORY, Industrial Agent
SAVANNAH, GEORGIA

THREE BIG AUCTION SALES

At BALTIMORE
January 5th, 1922

At SCHENECTADY
January 9th, 1922

At BOSTON
January 12th, 1922

THE WAR DEPARTMENT

Will offer for sale at public auction on the dates and at the places named in this advertisement both large and small lots of various kinds of merchandise. Goods will be offered in lots to suit attending bidders. Wherever possible samples of the merchandise to be sold or the actual merchandise itself may be inspected upon application to the SURPLUS PROPERTY OFFICER in charge of the sale. All goods will be sold "as is" and "where is" f.o.b. point of storage.

Much of the merchandise to be offered during these sales is seasonable and of a staple nature. A large part of it is new. Some of it has been thoroughly reclaimed and renovated and is ready for re-issue.

At BALTIMORE, Jan. 5th.

1,685	Artics.
165,128	Coats, jumper, denim, new.
203,356	Gloves, Jersey Knit, new.
1,023	Prs. Shoes, field, new.
4,231	lbs. Nails, clinch, wire.
378	Tapes, steel, 5 ft.
323	Wrenches, steel, monkey.
129	Trailers, for elec. tractors.
8,990	lbs. Salt, block.
107,250	lbs. Salt, rock, lump.
120,121	Tins, Tobacco, smoking, "Velvet".
18,141	Bags, Tobacco, smoking, Dukes Mixture.
21,104	Tubes, Lime, Chlorinated.
1,364	Watches, wrist.

At SCHENECTADY, Jan. 9th.

1,145,579	yds. Webbing, O.D. Gray.
101,305	yds. Cloth, Terry.
231,976	yds. Duck, O.D., Gray No. 1 to 10
192,676	yds. Sateen, rubberized 50"
51,542	yds. Velveteen, Gray, 27½"
16,968	yds. Moleskin O.D. 52"
148,500	Currycombs.
1,270	Buckets, galv'd. iron.
7,638	lbs. Wax, brown & black.
113,015	lbs. Steel Bars.
2,006,160	lbs. Carbide, Calcium.
42,958	lbs. Grease, Russian shell.
33,238	gals. Oil, Neatsfoot.
6,240	gals. Oil No. 12 Transit.
21,042	Sheets Metal, expanded.
3,903	Wagons, escort Cap. 5000 lbs.
2,831,115	lbs. Dehydrated Vegetables.
3,735,000	lbs. Salt, Issue.
165,346	lbs. Candles, 6's.

At BOSTON, MASS., Jan. 12th.

28,762	Barrack Bags, New.
1,332	Blankets, Cotton, O.D. & Wool, Recl'd.
76,289	Prs. Gloves, Jersey knit, New.
18,948	Prs. Gloves, Leather, Canton flannel, New.
74,082	Prs. Mittens, Canton flannel, leather palms, New.
1,321,163	Buttons, Jerkin, black, New
964,743	Yds. Webbing, O.D. Cotton
517,678	Yds. Moleskin.
20,000	Bottles Ink, Fountain Pen, 2 oz.
8,946	Mattresses, single.

Full particulars as to terms of sale, detailed descriptions of the various lots and kinds of merchandise to be sold, where same is stored, and other particulars may be had without charge upon application to

SURPLUS PROPERTY OFFICER

59th St. & First Ave.
Brooklyn, N. Y.

or

Army Supply Base
Boston, Mass.

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Large Quantities of

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January 11th, 12th, 13th and 14th at 11 A M each day.

AT DOULLUT & WILLIAMS SHIPBUILDING CO., Inc. SHIPYARD

Ft. Downman Road on Industrial Canal, NEW ORLEANS, LA.

9 NEW STEEL OIL BARGES, 2 TWENTY TON O & S LOCOMOTIVE CRANES, 5 PORTABLE SHIP CRANES COMPLETE.

3 SULLIVAN AIR COMPRESSORS, 2000 cubic ft. cap. 4 BABCOCK & WILCOX, A & T 250 HP BOILERS, 2 TUG BOATS, 100 and 500 HP. NEW CURTIS HYDROPLANE.

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2 STEAM AND GAS PORTABLE AIR COMPRESSORS, Westinghouse floating air compressor on barge.

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SHIPYARDS OPEN FOR INSPECTION COMMENCING THURSDAY, JANUARY 5th and continuing daily to time of sale.

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68 W. 45th St., New York City, N. Y.

DOULLUT & WILLIAMS SHIPBUILDING CO., Inc
New Orleans, La.

NOTICE OF SALE

Of Valuable Coal Plant And Leasehold

Notice is hereby given that the undersigned, B. Hampton Gray, Trustee in Bankruptcy for Perkins Coal Company, a corporation, bankrupt, will on the 30th day of December, 1921, on the premises at or near Lex Postoffice, in McDowell County, West Virginia, at two (2) o'clock p. m. offer for sale to the highest and best bidder for cash the following described coal plant and lease-hold, embracing that certain portion of land lying on the Western side of Dry Fork of Tug river in McDowell County, West Virginia, owned by the heirs of W. K. Evans and more particularly bounded and described as follows, to-wit:

Beginning at a point opposite Rocky Branch, a tributary of Dry Fork of Tug River, and running with the lines of E. M. Evans to a point in the line of D. Kennedy, near a house where Edward Shepperd now resides; thence with the line of D. Kennedy to a beech tree on the bank of Woosley creek, a tributary of Dry Fork of Tug River, and running with the meanders of said Woosley creek to a coal tipple near the mouth of said creek; thence running with the outcrop of said seam or vein of coal back to the beginning, containing about ——— acres.

Being the same property heretofore leased to H. W. Perkins by Victoria Evans et als by deed or lease dated the 20th day of June, 1918, and duly recorded in the office of the Clerk of the County Court of McDowell County, West Virginia, in Deed Book 78, page 85; it being the intention of the Trustee to convey all mining rights and privileges covered by said lease.

Said lease is upon a term of five years with the right of renewal thereof for an additional five years on condition that the lessee secure a side track from the Norfolk & Western Railway Company for use in loading said coal. The royalty to be paid the lessors is the sum of twenty cents per ton of two thousand pounds of coal, with a minimum annual royalty of one thousand ($1,000) dollars.

The lessee also has the right to use all timber, except walnut, on said premises ten inches and under in diameter in the mining and removing of said coal.

Said coal plant and lease-hold consists of one bucket line, tipple, mine cars, miners' houses, two powder magazines and such other equipment as usually is found upon coal mine leaseholds.

This is a small but very valuable mining proposition and the purchaser can immediately begin operations. Any further information relative to said coal plant and lease-hold can be obtained from the undersigned at his office in the Masonic Temple, Welch, West Virginia

TERMS OF SALE: Cash in hand on day of sale.

B. HAMPTON GRAY, Trustee.

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In looking ahead and forecasting general business conditions, with a view to forming your own business policy, you naturally consider all available information concerning the economic, social and governmental affairs of the country which have a bearing on business. You want, also, the opinions which representative men of affairs hold on these subjects.

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NEW MOTORS

HP.	Make	Phase	Type	RPM.	Cycle	Volts	Price
550	Crock-Whlr.	3	Sl. ring	1170	60	2200	$1875.00
60	Gener. Elec.	3	KT	1160	60	220	555.00
4—50	Gener. Elec.	3	sl. ring	690	60	440	775.00
8—50	Gener. Elec.	3	sl. ring	1200	60	220	600.00
12—25	Gener. Elec.	3	KT	1200	60	220	302.00
5—20	Gener. Elec.	3	KT	1200	60	220	267.00
4—15	Gener. Elec.	3	KT	1800	60	220	216.00
5—10	Bell	3	compoun.	1800	60	220	216.00
6—7½	Bell	3	compoun.	1800	60	220	190.00
13— 5	R & M.	3		1700	60	220	94.00
15— 3	Gener. Elec.	3	KT	1800	60	550	75.00
6—10	Gener. Elec.	2	KQ	1200	60	220	216.00
200—¼	Western El.	1	SA	1725	60	110	17.75
55—¼	Western El.		SD	1725	60	110	18.75

USED MOTORS

HP.	Make	Phase	Type	RPM.	Cycle	Volts	Price
400	Whse.	3	synchro.	450	60	2200	$1000.00
200	Gener. Elec.	3	sl. ring	600	60	2200	1400.00
200	Gener. Elec.	3	wound ro.	580	60	220	975.00
2—100	Gener. Elec.	3	sl. ring	514	60	440	1100.00
75	Gener. Elec.	3	sl, ring	900	60	2200	825.00
2— 50	Fks. Mse.	3	sq. ca.	900	60	220	325.00
2— 50	Burke	3	sl. ring	1200	60	220	475.00
2— 37	Gener. Elec.	3	sl. ring	750	60	220	450.00
2— 25	Wagner	3	sl. ring	1150	60	440	375.00
2— 30	Ideal	3	sq. ca.	1150	60	440	300.00
200	Whse	2	sl. ring	580	60	220	1275.00
133	Gener. Elec.	2	synchro.	900	60	2200	600.00
150KVA	Stanley	2	alterna.	900	60	2400	550.00
75	Burke	2	sq. ca.	360	60	220	750.00
90	Diehl		shunt	460		240	575.00
90	Gener. Elec.		compoun.	625		220	775.00
90	Whse.		compoun.	675		220	625.00
75	Diehl		shunt	340		220	575.00
4— 47	Whse.		compoun.	600		550	375.00
3— 35	Lincoln	3	sq. ca.	1200	60	440	245.00

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1—400 H. P. Rust Water-tube Boiler, complete, with stokers.
2—350 H. P. Vogt Water-tube Boilers, complete, with stokers
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1—600 H. P. Springfield Scotch Type Boiler.
1—72″x18′ H. R. T., lap side seam, triple riveted.
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44—823 H. P. Sterling Boilers, Type M-30, 200 pound pressure. Equipped with Westinghouse 8 retort stokers, Vulcan soot cleaners, flow meters, 100,000 cu. ft. capacity forced draft fan direct connected to turbine.
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1—350 H.P. B. & W.	150 lb
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1—17x34x48 Hamilton Cross Compound heavy duty Corliss Engine, designed for rope drive.
1—24x48 Hamilton Girder Frame Corliss Engine.
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1—16x18 Lane & Bodley Slide Valve.
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1—13x16 Chandler & Taylor Slide Valve.
1—12x12 Brownell Automatic.
1—10x14 Houston, Stanwood & Gamble Slide Valve.
1—10x12 Chandler & Taylor Slide Valve.
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ROTARY CONVERTERS

2—1000 kw. Westinghouse, 600 volt D. C., 6 phase, 60 cycle, 900 R. P. M. Rotary Converters, with Transformers for 66,000 primary voltage.

MOTOR GENERATOR SET

1—200 kw. Allis-Chalmers, 275 volt, Synchronous Motor Generator Set, 900 R. P. M., with a 225 kva. Allis-Chalmers, 3 phase, 60 cycle, 2300 volts, 900 R. P. M. Motor, complete.

D. C. GENERATORS.
Belted and Direct Connected.

1—10 K.W. Wesche, 110 volt, 1000 R.P.M., compound wound, belted type Generator.
1—17½ K.W. Triumph, 125 volt, 140 amp., 1250 R.P.M., compound wound, belted Generator.
1—20 K.W. Western Electric, 120 volt, 1250 R.P.M., compound wound, belted Generator.
1—22½ K.W. Allis-Chalmers, 120 volt, 187.5 amp., 925 R.P.M., compound wound, belted Generator.
1—35 K.W. Triumph, 125 volt, compound wound, Generator, direct connected to a 9x12 Skinner Automatic Engine.
1—50 K.W. Allis-Chalmers, 250 volt Generator, direct connected to a 12x12 Ball Automatic Engine on sub-base.
1—75 K.W. Jantz & Leist, 250 volt, direct current, compound wound, Generator, direct connected to a 15x13 Ideal Automatic Engine on sub-base.
1—100 K.W. Triumph, 125 volt, 675 R.P.M., compound wound, belted type Generator.
1—100 K.W. Bullock, 120 volt, compound wound, Generator, direct connected to a 16x15 Skinner Automatic Engine on sub-base. (Can be rewound for 250 volts.)
1—125 K.W. Westinghouse Interpole, 250 volt, compound wound Generator, direct connected to a 16x16 Skinner Automatic Engine on sub-base.
2—150 K.W., each, Westinghouse, 275 volt, 200 RPM Generators, each direct connected to an 18x 19 Fleming-Harrisburg Automatic Engine, all on sub-base.
1—250 kw. Crocker-Wheeler, 250 volts, 200 R. P. M. Generator, direct connected to a 22x22 Harrisburg Automatic Engine.

A. C. GENERATORS.
Belted and Direct Connected.

1—5000 kw. General Electric Vertical, 3 phase, 60 cycle, 4500 volts, Turbo Generator Set, with Condenser and accessories.
1—3000 kw Westinghouse, 3 phase, 60 cycle, 4400 volts Turbo Generator Set. Condensing.
1—625 kva. Westinghouse-Parsons, 3 phase, 60 cycle, 230 volt Turbo Generator Set, non-condensing.
1—500 K.W. Westinghouse, 3 phase, 60 cycle, 2300 volt Generator, direct connected to a 26x42 Hamilton Heavy Duty Corliss Engine 125 R.P.M., complete.
1—250 K.V.A. Westinghouse, 2 phase, 60 cycle, 2400 volt Generator, direct connected to a 20x 22 Erie Ball Corliss Valve Engine, complete. (Can be reconnected for 3 phase.)
1—300 kw. General Electric, 3 phase, 60 cycle, 2300 volt Turbo Generator Set. Condensing.
2—200 K.W. DeLaval-Bullock, 3 phase, 60 cycle, 220-440 volt Turbo Generator Sets, with Condenser and accessories.
1—150 kva. Allis-Chalmers, 3 phase, 60 cycle, 2300 volt, 150 R. P. M., Alternator direct connected to a 14x30 heavy duty double eccentric Allis-Chalmers Corliss Engine.
1—125 K.V.A. Ft. Wayne, 3 phase, 60 cycle, 1100-2200 volt Generator, direct connected to a Erie Ball Automatic Engine, with accessories.
1—100 kw. General Electric, 3 phase, 60 cycle, 220 volt, 3600 R. P. M., horizontal Turbo Generator Set with Condenser and accessories.
1—75 K.V.A. Westinghouse, 2 phase, 60 cycle, 2400 volt Generator, direct connected to a 12x 12 Skinner Automatic Engine, with accessories. (Can be reconnected for 3 phase.)
1—60 K.V.A. General Electric, 3 phase, 60 cycle, 480 volt Generator, direct connected to a 12x12 Skinner Automatic Engine, with accessories.

D. C. MOTORS

No.	H. P.		Make.	Volts.	R.P.M.
1	50	Used	Allis-Chalmers	250	800
3	30	Used	Jantz & Leist	250	600
1	20	Used	Triumph	220	965
1	15	Used	Minnpls.	110	350
1	12½	Used	Minnpls.	220	950
1	7½	Used	Triumph	220	835
2	5	Used	Triumph	220	1350
1	5	Used	Jantz & Leist	220	900
1	5	Used	Triumph	115	1000
1	5	Used	Minnpls.	110	725
2	4	Used	Triumph	110	1025

Also many other sizes and types.

BOILERS

5-1040 H. P. Edgemore, ASME Code, 200 lb. pressure
4—823 H. P. Sterling, ASME Code, 200 lb. pressure
4—350 H. P. Sterling, 190 lb. pressure
3—250 H. P. Franklin Heine type, 150-lb. pressure.
1—207 H. P. Geary, Heine type, 170 lb. pressure
2—175 H. P. Atlas, 150-lb. pressure.
1—200 H. P. 84x18 high pressure H. R. T.
4—150 H. P. 72x18 high pressure H. R. T.
5—125 H. P. 72x16 high pressure H. R. T.
2—100 H. P. 66x16 high pressure H. R. T.
1— 80 H. P. 60x16 high pressure H. R. T.
1— 60 H. P. 54x14 high pressure H. R. T.
1— 50 H. P. Standard Fire Box on skids.
1— 25 H. P. 42x95 new Vertical, 125-lb. pressure.
1— 15 H. P. 36x83 new Vertical, 100-lb. pressure.
1— 10 H. P. 30x83 new Vertical, 100-lb. pressure.

A. C. MOTORS.
3 Phase, 60 Cycle, Squirrel Cage and Slip Ring.

No.	H. P.		Make.	Volts.	R.P.M.
12	7½	New	General Electric	220	1800
8	10	New	General Electric	220	1200
2	15	New	Fairbanks-Morse	440	1750
10	15	New	General Electric	220	1200
1	20	Used	Fairbanks-Morse	220	1200
8	20	New	General Electric	220	1200
8	25	New	General Electric	220	1200
1	25	New	G. E. (Slip Ring)	220	1200
5	30	New	General Electric	220	1200
1	30	Used	Westinghouse	220	1200
1	35	Used	G. E. (Slip Ring)	220	1200
4	40	New	General Electric	220	1200
4	50	New	General Electric	220	900
1	50	Used	Western Electric	440	900
3	50	New	G. E. (Slip Ring)	440	900
4	75	New	G. E. (Slip Ring)	220	900
3	100	New	G. E. (Slip Ring)	220	900
1	100	Used	Westinghouse	220	1200
2	150	New	G. E. (Slip Ring)	440	720
1	200	New	G. E. (Slip Ring)	440	600
3	250	New	G. E. (Slip Ring)	440	600
1	300	New	G. E. (Slip Ring)	440	600

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1—5-hp. KVA. **Constant Current Transformer.**

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1—100 H.P. Bruce Natural Gas Engine.
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Can be seen in operation.
Also will sell Direct Current generators with engines if desired.

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DIRECT CONNECTED 60 Cycle Units

KW	Generator	Engine
40	Westinghouse	Ames
70	Westinghouse	Ideal
70	Westinghouse	Ball
70	General Electric	Ball
80	Westinghouse	Hamilton four valve
120	Westinghouse	Rice Sargent Corliss
120	General Electric	Hamilton Corliss
125	General Electric	C.&G. Cooper Corliss
125	General Electric	Harrisburg
125	General Electric	Erie City 4 valve
150	Bullock	Ames
175	General Electric	Skinner Unaflow
200	Westinghouse	Lents poppet valve *new*
240	General Electric	Ames Tandem Comp.
250	Allis-Chalmers	Buckeye
250	General Electric	McIntosh Seymour
300	General Electric	Green Wheelock
300	General Electric	McEwen Tandem Comp.
325	Allis-Chalmers	Buckeye Tandem Comp.
500	Westinghouse	C.&G.Cooper Cross Compound

DIRECT CONNECTED UNITS 110/125 Volts D. C.

KW	Generator	Engine
20	Western Electric	Ball-Wood
25	Western Electric	Ball-Wood
50	Western Electric	Ball-Wood
60	Western Electric	Ball-Wood
75	Thompson Ryan	Ridgway four valve
100	General Electric	Harrisburg
110	Westinghouse	Straight line
150	Allis-Chalmers	Erie City four valve
200	Bullock	Allis-Chalmers
250	Crocker-Wheeler	Harrisburg Tandem

DIRECT CONNECTED UNITS 220/250 Volts D. C.

KW	Generator	Engine
39	General Electric 3 wire	Harrisburg
75	Westinghouse 3 wire	Harrisburg
100	Thompson Ryan	McEwen
100	General Electric 3 wire	Ames
100	Sprague	Ames
100	Westinghouse	Harrisburg
100	General Electric	American Ball Angle Compound
100	Crocker-Wheeler	Harrisburg
150	General Electric	Harrisburg
150	Western Electric	Erie Ball four valve
160	General Electric	Harrisburg
200	Westinghouse	American Ball Angle Compound
200	Milwaukee	Ames
225	C&C	Hamilton 4 valve
300	Westinghouse 3 wire	Murray Corliss
300	Westinghouse	Buckeye Cross Compound
300	General Electric 3 wire	Ball-Wood Tandem
350	General Electric	Buckeye Cross Comp. Vertical
500	Burke	Erie Ball

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120"	dia. x 10'	2⅛"	long, 6,000	gallons.
120"	dia. x 13'	6⅛"	long, 8,000	gallons.
120"	dia. x 15'	2½"	long, 9,000	gallons.
120"	dia. x 20'	2⅞"	long, 12,000	gallons.
120"	dia. x 25'	2½"	long, 15,000	gallons.
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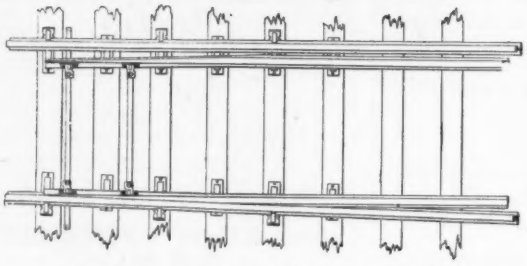
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Good working order Real Bargains
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With Angle bars to match all sections.
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For one No. 0 Austin, Gasolene driven, for ditches 22" to 42" wide; maximum depth 18 feet; and one 1921 Model Austin, all caterpillar, gasolene driven; for ditches 20" to 30" wide; maximum depth 8 feet. Machines now at Jersey City, N. J.
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We offer for immediate shipment the following choice lots of relaying steel rails:
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Offices: Reading, Pa.; Lebanon, Pa.: New York, N. Y.; Pittsburgh, Pa.; Boston, Mass. Yards: Reading, Pa.; Donaghmore, Pa.; Lebanon, Pa.; Pittsburgh, Pa.

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This service is yours for the asking without any obligation whatever on your part.

"CINCINNATI" Track Equipment is the kind you will eventually use.

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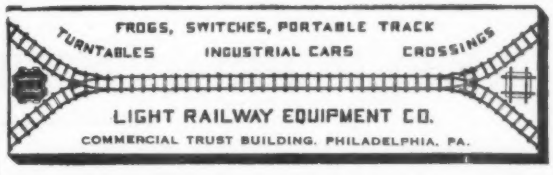
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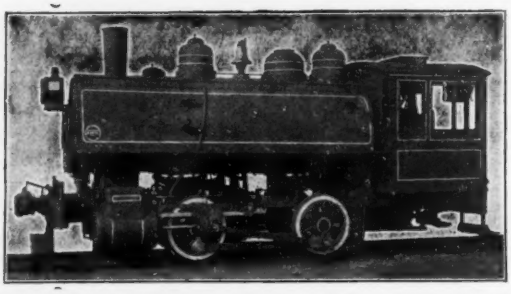
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The reputation of Baldwin four and six-coupled tank locomotives for contractors is world wide. Built for the hardest kind of continuous service, over rough and uneven tracks and with ample power to take steep grades with heavy loads. Narrow or standard gauge. Prompt deliveries.

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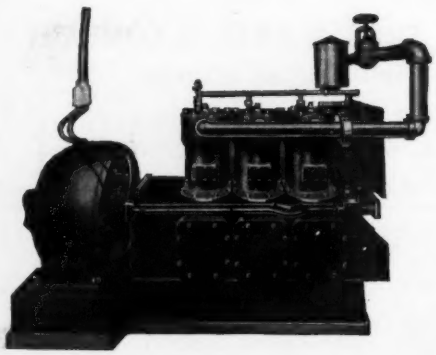
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KEEP PRODUCTION COSTS DOWN

Adapt compressed air to your factory operations.

Install a WESTINGHOUSE-NATIONAL compressor to insure steady, profitable results from your pneumatic machinery.



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Cut down electric bills, save floor space, reduce maintenance costs, require minimum attention.

They make hard jobs easy and increase plant capacity.

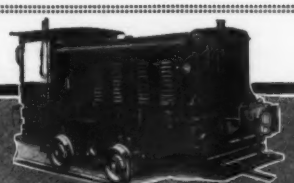
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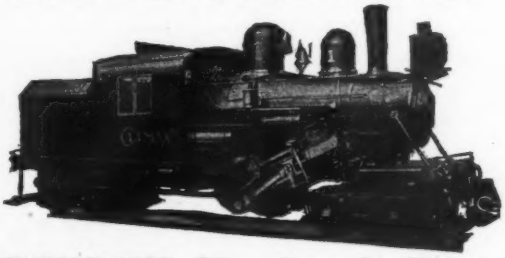
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FOR EVERY PURPOSE
H. K. PORTER COMPANY
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CLAM SHELL BUCKETS



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Established 1892 Representatives throughout the world

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The "Robins Hand Book of Conveyor Practice" will help you solve your conveying problems. Write for a copy.
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COMPRESSORS

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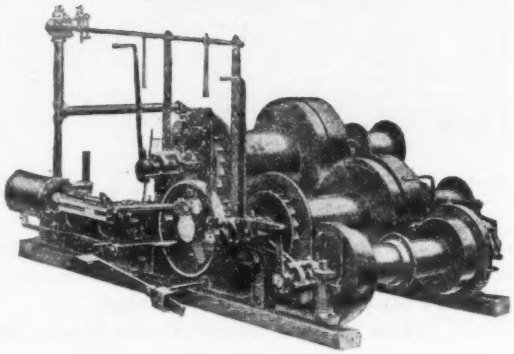
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No. 577 in Contractors Hoist Catalog No. 16
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For Every Type of Contracting Work



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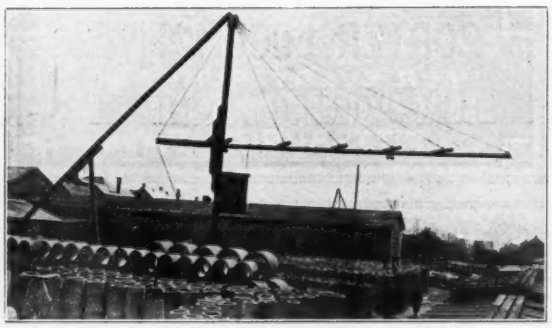
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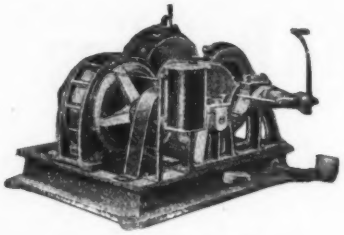
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Stand up under hard usage:—



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They are standard equipment and give powerful uninterrupted performance to the satisfaction of men who know performance when they see it.

Flory Hoists are built for electric, steam or air drive.

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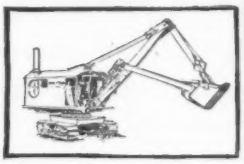


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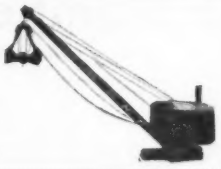
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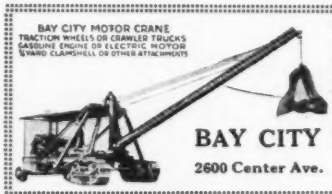
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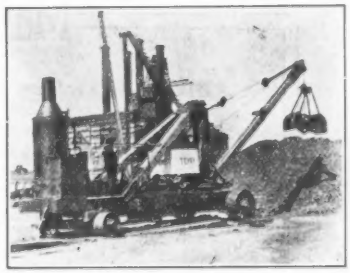
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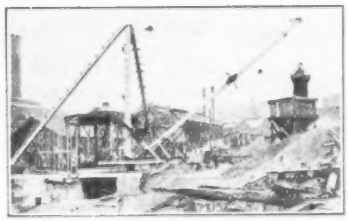
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Revolving and Railroad Type Steam Shovels
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Clamshell and Drag line outfits, Railroad Ditchers, Locomotive Cranes and Dredges.
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Builders of the highest type



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Hundreds of millions of dollars will be spent by the South in 1922 for highway construction, out of which will come a big and continuous demand for road building materials, equipment and supplies.

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Annual Road Number

OF THE

Manufacturers Record

DATE—January 12, 1922.

CONTENTS—A review of the progress of the Southern States in Highway improvements in 1921, and an outline of the work to be undertaken in 1922.

DISTRIBUTION—In addition to regular circulation, copies will be sent to all the leading state highway officials of the South, and will be distributed from the booth of the Manufacturers Record at the American Road Builders' big show in Chicago the week of January 16.

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I SAY YOU DON'T.

What you want is a hard-surfaced road, with little cost for maintenance—a road that can be traveled in rain or snow, summer and winter. You want a PERMANENT road—that means CONCRETE!

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Output 50,000 barrels monthly. No old contracts on our books, hence prompt shipment.

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We produce only one grade

THE HIGHEST

ALWAYS UNIFORM

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That is what Government engineers are doing to prevent the cantankerous Mississippi from washing away its own bottom.

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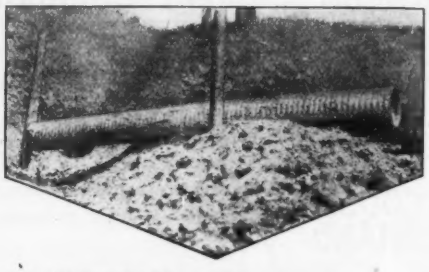
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Superior quality approved by Federal Highway authorities for highway construction.

Crusher capacity, 1000 tons per day.

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Best for All Purposes

We manufacture all sizes of stone suitable for all classes of road building and concrete work where only a high-grade limestone is required.

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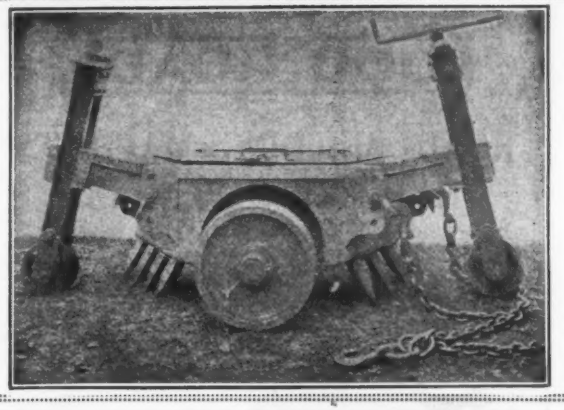
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THE PORCUPINE SCARIFIER

Will break up 400 square yards of macadam a day—a record impossible with any other method

WILL PAY FOR ITSELF IN ONE MONTH

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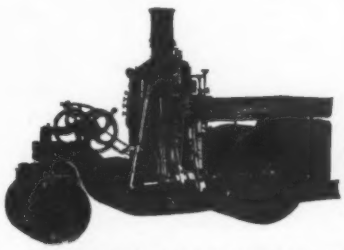
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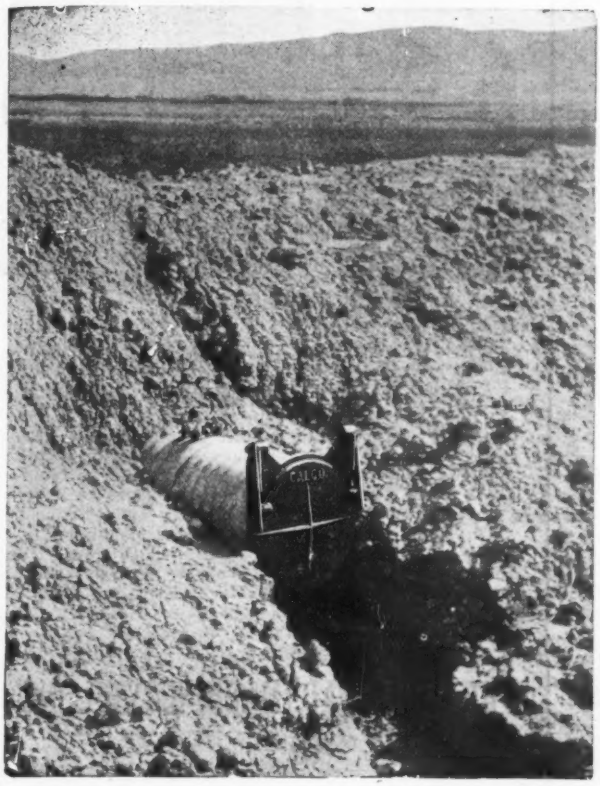
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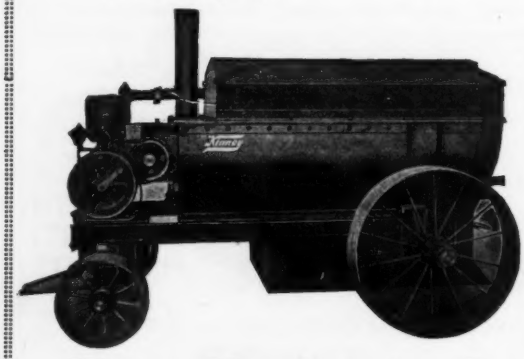
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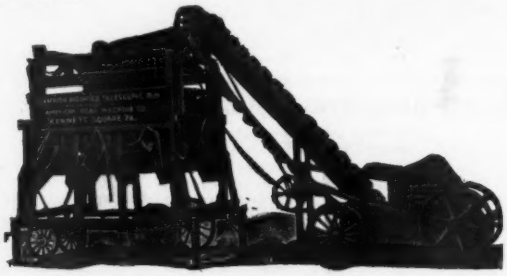
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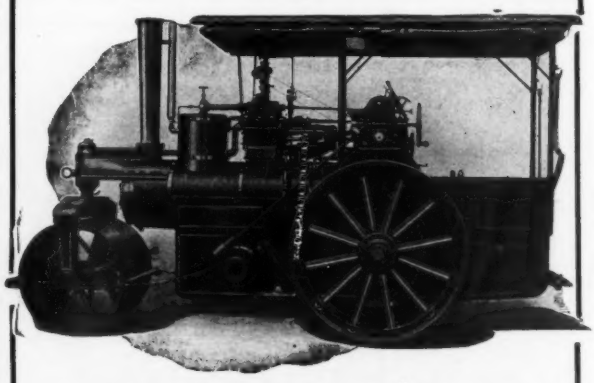
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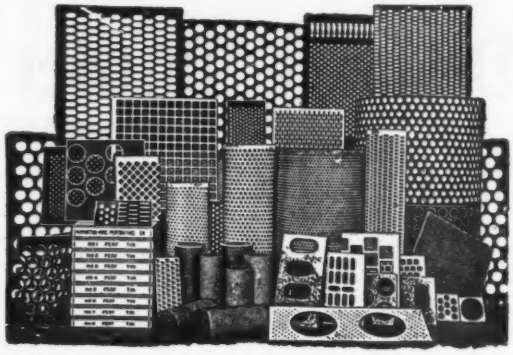
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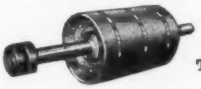
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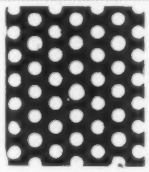
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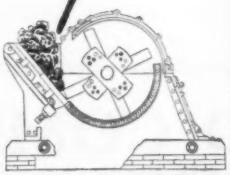
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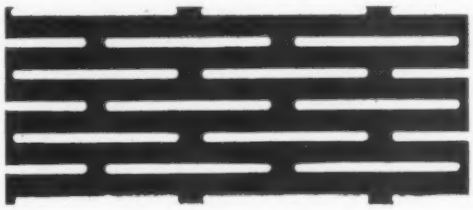
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General Electric Co., Schenectady, N. Y.
Westinghouse El. & Mfg. Co., E. Pitts., Pa.

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Virginia Bridge & Iron Co., Roanoke, Va.

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Bourbon Copper & Brass Works Co., Cincinnati, O.
Colonial Supply Co., Pittsburgh, Pa.
Columbian Iron Works, Chattanooga, Tenn.
Crane Co., Chicago, Ill.
Frick Co., Waynesboro, Pa.
Jenkins Bros., New York, N. Y.
Ludlow Valve Mfg. Co., Troy, N. Y.
Lunkenheimer Co., The, Cincinnati, O.
Powell Co., The William, Cincinnati, O.
Power Piping Co., Pittsburgh, Pa.
Ryerson & Son, Jos. T., St. Louis and New York.
Vogt Mch. Co., Inc., Henry, Louisville, Ky.
Westinghouse Traction Brake Co., Wilmerding, Pa.
Wood Drill Works, Paterson, N. J.

Acid-proof
Lunkenheimer Co., The, Cincinnati, O.

Gas Producing.
Morgan Construction Co., Worcester, Mass.

Gas Reversing.
Morgan Construction Co., Worcester, Mass.

Gate.
Ludlow Valve Mfg. Co., Troy, N. Y.

VARIABLE-SPEED TRANSMISSION.
Reeves Pulley Co., Columbus, Ind.

VARNISH.
Berry Brothers, Inc., Detroit, Mich.
Wadsworth, Howland & Co., Inc., Boston, Mass.

VENEER CUTTING MACHINES.
Titus, E. E., Petersburg, Va.

VENTILATING APPARATUS. (Engineers' and Contractors'.)
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Buckeye Blower Co., Columbus, O.
Buffalo Forge Co., Buffalo, N. Y.
Mechanical.
Advance Company, Richmond, Ind.

VENTILATORS. (Roof.)
Canton Art Metal Co., Canton, O.
Edwards Mfg. Co., The, Cincinnati, O.
Lenderking, Philip H., Baltimore, Md.
Robertson Co., H. H., Pittsburgh, Pa.
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Western Tool & Mfg. Co., Springfield, O.

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Bonney Supply Co., Inc., Rochester, N. Y.
Heiss Mfg. Co., Geo., New York, N. Y.
Link-Belt Co., Philadelphia, Pa.

WALL PLUGS. (Galvanized.)
Van Dorn Iron Works Co., Cleveland, O.

WARDROBES. (Rolling, Disappearing Door.)
Wilson Corporation, The J. G., New York.

WASHERS.
Copper, Iron, Brass, Aluminum.
Stimpson Co., Edwin B., Brooklyn, N. Y.

WASHING MACHINERY.
Ore and Phosphate.
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Sand and Gravel.
Bonney Supply Co., Inc., Rochester, N. Y.
Link-Belt Co., Philadelphia, Pa.

WATCHMAN'S PORTABLE CLOCKS.
Chicago Watchman's Clock Works, Chicago, Ill.
Eco Clock Co., Atlanta, Ga.
Eco Clock Co., Boston, Mass.
Newman Clock Co., New York, N. Y.

WATERPROOFING. (For Brick, Concrete, Granite, etc.
Master Builders Co., The, Cleveland, O.
Sonneborn Sons, Inc., L., New York, N. Y.
Texas Co., The, New York, N. Y.
Wadsworth, Howland & Co., Inc., Boston, Mass.

WATER PURIFICATION.
Permutit Co., New York, N. Y.
Roberts Filter Mfg., Co., Darby, Pa.
Scaife & Sons Co., Wm. B., Pittsburgh, Pa.

WATER-SOFTENING APPARATUS.
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American Water Softener Co., Phila., Pa.
Borromite Company, Chicago, Ill.
International Filter Co., Chicago, Ill.
Permutit Co., New York, N. Y.
Pittsburgh Filter & Engr. Co., Pittsburgh, Pa.
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WATER-WORKS, SUPPLIES, APPLIANCES.
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Bourbon Copper & Brass Works Co., Cincinnati, O.
Coldwell-Wilcox Co., Newburgh, N. Y.
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Cook, A. D., Lawrenceburg, Ind.
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Hamburg Boiler Works, Hamburg, Berks County, Pa.
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National Water Supply Co., Birmingham, Ala.
Pacific Pipe & Tank Co., San Francisco, Cal.
U. S. Cast Iron Pipe & Fdry Co., Burlington, N. J.
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Cantol Wax Co., Bloomington, Ind.

WELDING.
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WELDING APPARATUS.
Electric Arc.
General Electric Co., Schenectady, N. Y.

Oxy-Acetylene.
Oxweld Acetylene Co., Newark, N. J.
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Sydnor Pump & Well Co., Richmond, Va.
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Cook, A. D., Lawrenceburg, Ind.
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WINDOW GLASS.
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Youngstown Sheet & Tube Co., Youngstown, O.

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Gulf States Steel Co., Birmingham, Ala.

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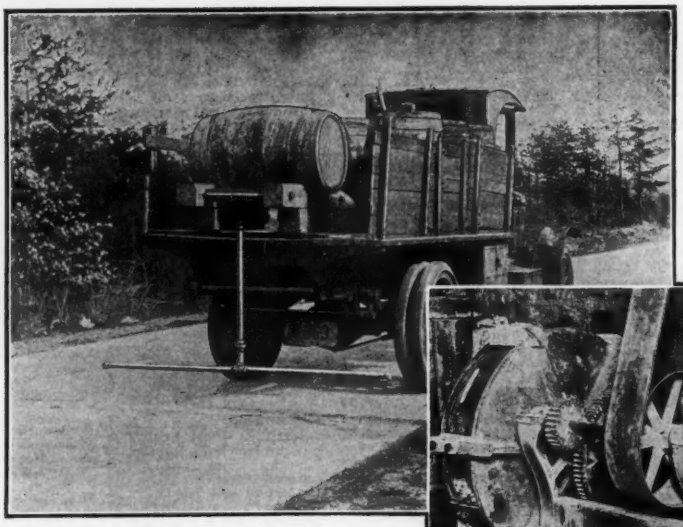
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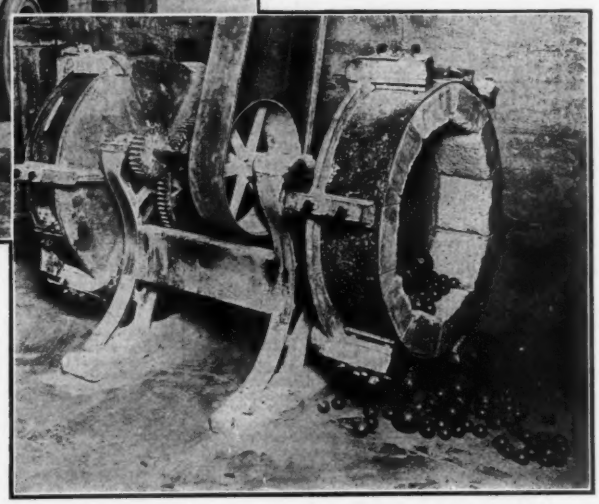
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Left: Application of HARD-N-TYTE to Concrete Road

Talbot-Jones rattler, showing test slabs in position



If the wear on Concrete Roads could be reduced 30% –

wouldn't it be worth while finding out how to do it?

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THIS test was made by the engineers of the General Chemical Company. The specimens used were standard concrete road slabs, 5x5x8 inches. 1-2-3 concrete, made up according to recommendations of Lewis Institute Structural Materials Research Laboratory. Sand and gravel, well graded and of good quality, were used as aggregate. Half of the slabs were treated with Hard-n-Tyte in two applications. Treated and untreated samples, 28 days old, were subjected to identical wear in a Talbot-Jones rattler—1800 revolutions and 200 pound charge of iron shot.

Under this test the slabs treated with Hard-n-Tyte showed 30% less wear than those not treated (Note: so severe was this test that more than an inch of concrete was worn from the untreated slabs.)

Hard-n-Tyte is the trade name applied to pure white crystals of magnesium zinc fluosilicate. When these crystals are dissolved in water and the solution is flushed over a concrete road the surface becomes flint hard. This condition is caused by the formation of insoluble and extremely durable silicates and fluorides within the concrete itself.

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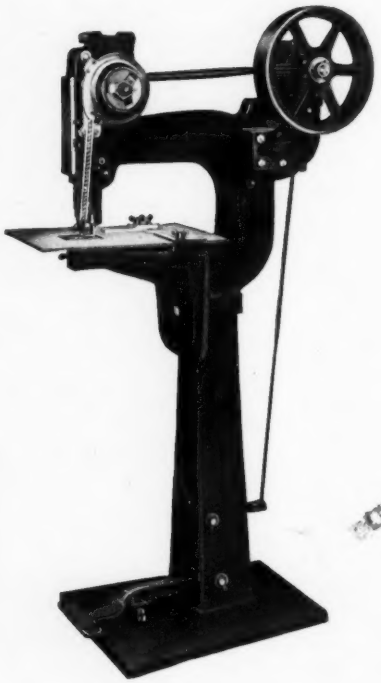
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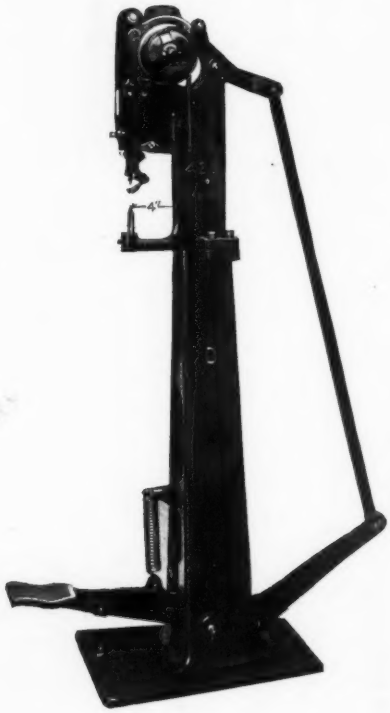
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